Joining georgia.gov Guide

A Reference Guide

Prepared by:

Georgia Technology Authority

Version 2.1

September 2003

Table of Contents

Questions about the content within this Guide should be sent to guide@gta.ga.gov

Questions about the content within this Guide should be sent to guide@gta.ga.gov

Table of Contents

Questions about the content within this Guide should be sent to guide@gta.ga.gov

Table of Contents

Questions about the content within this Guide should be sent to guide@gta.ga.gov

Section 1 - Document Version Control

Overview

The **Joining georgia.gov Guide** can be found on **georgia.gov** by clicking on Government/State Government/Intergovernmental/Joining georgia.gov Guide or by clicking below:

http://www.georgia.gov/00/channel/0,2141,4802_3665306,00.html.

While both the online and hardcopy versions address policy, process and guidelines/tips for content and applications, the online version will let users access logical groupings of information based on specific topics of interest. Agencies will be able to search for and view relevant information quickly and easily that will help them save time and effort on their **georgia.gov** projects.

A Living Document

The Guide should serve as a "living" reference manual that agencies can use to obtain answers and share pertinent experiences. As new ideas are developed and project issues resolved, that knowledge will be incorporated in the Guide and disseminated throughout the agency community.

The Georgia Technology Authority (GTA) will review and update the Guide regularly using input from GTA staff and the agencies. Therefore, GTA strongly encourages agencies to submit suggestions and/or "lessons learned" with the intent of making it easier for all to join and participate on **georgia.gov**.

Procedure for Submitting Changes

Agencies that have joined or are intending to join **georgia.gov** may request changes to the Guide through the guide@gta.ga.gov mailbox via the following procedure:

1. If clarification or follow up by GTA is needed, all requests should include:

- detailed description of the change
- section(s) impacted
- potential benefits
- reply contact information (e.g., name, e-mail address and phone number)

2. The GTA Portal Liaison Team will instigate a review; approved changes will be incorporated into the Guide, which will be re-published to **georgia.gov**.

Table 1 shows the current revision history of the **Joining georgia.gov Guide**:

Revision #	Revision Date	Changes Made (Description)	Revision Author
1.0	12/20/02	Completed v1.0 of the Guide for Content only.	GTA
2.0	03/31/03	Completed v2.0 of the Guide	GTA
2.1	09/2003	Updates to Guide – see Release Notes	GTA

Table 1 - Revision History of the **Joining georgia.gov Guide**

Section 2 - Introduction

Overview

georgia.gov provides a universal point of access to Georgia government information and services. It includes general or enterprise content, agency sub-portals (i.e., an agency Website or "Portal business card" until the creation of a true **georgia.gov** agency sub-portal), a customer support call center (i.e., the Portal Contact Center), and any other place or means that Georgia constituents will use to obtain **georgia.gov** services and information.

To maintain effectiveness across **georgia.gov**, all access points must provide consistent, comprehensive and consolidated information. Therefore, **georgia.gov** has been designed to be easy to use both internally and externally and should serve as an "electronic door" into state government information for constituents.

Purpose and Audiences for the Guide

The **Joining georgia.gov Guide** is a reference manual for the policies, standards, processes, information and suggestions that will assist Georgia agencies in performing the tasks necessary to deliver content and applications across **georgia.gov**. Such information will help them understand the requirements and strategies necessary to establish the electronic door. At the highest level, "joining" **georgia.gov** means agreeing to abide by these requirements. It also means joint administration by GTA and the agencies of the processes for delivering content or applications across the **georgia.gov** infrastructure.

The Guide is written for several specific audiences. It is for agency personnel who have either made the decision to join **georgia.gov** or are seriously considering joining and want more in-depth information about the processes and requirements. Such personnel include:

- IT Directors
- Agency Portal Managers

- Agency Content Administrators
- Content Contributors
- Project Managers

How to use the Guide

The two main areas of interest associated with joining **georgia.gov** are *content management and application delivery*. However, just as important is the area of *portal support*. This **Joining georgia.gov Guide** defines the requirements and processes for each area. Agencies will become familiar with the areas as they begin to define their resource needs, and develop and establish their internal plans for delivering content and applications through **georgia.gov**.

Content Management

Content management is one of the key advantages of an agency's participation in **georgia.gov**. Centrally managed content minimizes the time spent on updating and allows sharing of consistent and reliable information across agencies.

A complete diagram of the Content Management Process is in Chapter 4 of this Guide. It shows that to deliver content across **georgia.gov** an agency will begin by working with GTA in setting expectations through a signed Memorandum of Understanding (MOU). Additional information about Content Management and **georgia.gov** Content Management System is in Chapter 6.

Application Delivery

Access to agency services in an intuitive, intention-based manner from a single trusted source is one of the key advantages of agencies delivering applications via **georgia.gov**. **georgia.gov** provides agencies a consistent, reliable and trusted mechanism to deliver information and services to their constituents. At the same time, **georgia.gov** provides constituents a single common doorway to access services provided by a variety of agencies without the constituent having to possess prior knowledge as to which agency provides the service, the agency's location; or the agency's Web address.

A complete diagram of the Application Delivery Process is in Chapter 4 of this Guide. It traces agency and GTA responsibilities through the stages of planning, requirements, analysis and design, implementation, testing, deployment, and hosting/support. Additional information about application development and deployment is available in Chapter 6.

Associated Documents

This Guide serves as both a summary and a reference framework to aid agencies in delivering content and applications across **georgia.gov**. It is not a comprehensive collection of all technical specifications and management procedures. Such specifications and procedures are in the following associated documents:

Associated Document	Location
Accessibility statement	http://georgia.gov/accessibility
Configuration Management Process Documents Library	http://www.georgia.gov/00/channel/0,2141,4802_3665308,00.htm
Content Development Requirements	http://georgia.gov/vgn/images/portal/cit_1210/8399258georgiagov_content_development_requirements.pdf
Domain Name Standard	http://gta.georgia.gov/vgn/images/portal/cit_1210/2583411Domain_Name_Standard.pdf
Enterprise Information Security Policies	http://gta.georgia.gov/vgn/images/portal/cit_1210/1218035Enterprise_Security_Policies.pdf
Information Architecture Methodology	http://www.georgia.gov/vgn/images/portal/cit_1210/3563883georgia.govInformationArchitectureMethodology.pdf
Intellectual Property Display Standard	http://gta.georgia.gov/vgn/images/portal/cit_1210/1420141Intellectual_Property_Usage_Policy.pdf
Link Disclaimer	http://georgia.gov/notices
Linking Standard	http://gta.georgia.gov/vgn/images/portal/cit_1210/1420145Link_Policy.pdf
Portal Developers Kit	http://www.georgia.gov/00/channel/0,2141,4802_9005582,00.html
Privacy Statement	http://georgia.gov/privacy
Problem Management (ServiceCenter®) Manual	http://georgia.gov/vgn/images/portal/cit_1210/3563844PeregrineServiceCenterManual.pdf
Security Statement	http://georgia.gov/notices
Style Guide	http://georgia.gov/vgn/images/portal/cit_1210/3563842style_guide.pdf
Sub-Portal Training Manual	http://georgia.gov/vgn/images/portal/cit_1210/3563840subportal_manual.pdf
Test Checklist for Portal Acceptance Testing	http://www.georgia.gov/vgn/images/portal/cit_1210/3563887TestChecklistPortalAcceptance.pdf
Test Plan for Portal Applications	http://www.georgia.gov/vgn/images/portal/cit_1210/3563885TestPlanApplicationsJoiningPortal.pdf
Trademark, Service Mark, and Copyright Notice	http://georgia.gov/notices

Section 3 - georgia.gov Standards

Overview

Every agency that joins **georgia.gov** shall adhere to the **georgia.gov** standards contained in this section of the Guide and to all applicable published Enterprise policies and standards. Such adherence is necessary in order to preserve and protect the integrity of **georgia.gov**. The standards contained within this Chapter cover areas of general applicability as well as certain essential or "core" requirements in the specific areas of content, applications, and support.

While **georgia.gov** standards do not dictate procedures or details at a micro level, they do provide the framework for uniformity and consistency in the following areas:

- **georgia.gov** Brand and Logo Usage
- Content Management System (CMS)
- Information Architecture/Taxonomy
- Privacy Statement Usage
- Security
- Accessibility
- Domain Name Usage
- **georgia.gov** Linking Standard
- Trademark, Service Mark and Copyright Usage
- Content Core Requirements
- Applications Core Requirements
- Support Core Requirements

Standards

Specific standards statements are below in ***bold italicized text***, with additional supporting information and links. Adherence to all standards related to **georgia.gov**, unless an exception is granted, is essential to ensuring the integrity of the enterprise portal and the usability experience of the constituent.

georgia.gov Brand and Logo Usage

All agencies that join georgia.gov must adhere to all requirements and restrictions regarding use of the georgia.gov brand and logo in all online and offline media. The georgia.gov brand may only be used by an agency via the CMS or in associated offline print media. For additional information on usage requirements, see the georgia.gov Style Guide.

Proper use and display of the logo is incorporated in the **georgia.gov** Content Management System templates. Agencies will be trained on how to use these templates for maintaining their sub-portals.

Agency Co-branding

Space in the upper right corner of the sub-portal is for an agency's logo. This logo serves as a co-brand to the state **georgia.gov** brand. Training will be provided to agencies on how to add agency-specific branding to their sub-portals. Sub-portals may only be maintained through the CMS application and templates.

See the Sub-Portal Training Manual

Content Management System

All agencies that join georgia.gov shall use the centralized enterprise Vignette Content Management System and its templates for the presentation of content and applications on georgia.gov. The Content Management System (CMS); its integrated component, Multi-site Content Manager (MCM); and the evolving inventory of CMS Templates currently comprise the georgia.gov enterprise content management system.

Templates

Templates are an integral part of **georgia.gov** and are designed to support the information architecture framework of its environment. Therefore, templates must be utilized intact and will be provided and maintained by GTA. The process for requesting changes/additions to the existing template inventory is in Chapter 4 *Processes for Deploying to* **georgia.gov**.

Agencies will be trained on how to use these CMS templates to maintain their sub-portals. They may only modify their sub-portals through the templates provided on **georgia.gov**.

 See the Sub-Portal Training Manual

Information Architecture / Taxonomy

All agencies that join georgia.gov must adhere to the 'enterprise portal information architecture'. The current information architecture framework is in the **georgia.gov** Information Architecture Methodology document.

See the **georgia.gov** Information Architecture Methodology document.

The information architecture described in this document will evolve over time; however, the **georgia.gov** Information Architecture Methodology document should continue to serve as a useful guide.

Prior to deploying content on **georgia.gov**, agencies must also allocate time and resources to prepare and organize their content according to the **georgia.gov** taxonomy framework. Such preparation, as well as a working knowledge of the georgia.gov CMS, is vital to the agencies' success in creating and maintaining their sub-portals.

Privacy Statement Usage

All agencies that join georgia.gov shall take reasonable steps to ensure and protect the privacy of constituents and their information in all electronic interactions on georgia.gov. This is essential in order to maintain the status of georgia.gov as a trusted provider and source for government services and information. ***Agencies shall review the standard georgia.gov Privacy Statement and either: 1) ensure that their content and applications are consistent with it, or 2) create and maintain a privacy statement that accurately reflects their content and applications by following the steps described in this section.***

In all instances, an agency's first step is to review the standard **georgia.gov** Privacy Statement. See the current **georgia.gov** Privacy Statement .

The **georgia.gov** Privacy Statement is incorporated in the CMS templates and, as such, is included at the bottom of all **georgia.gov** and agency sub-portal pages.

Agencies are responsible for reviewing the **georgia.gov** Privacy Statement to ensure that it accurately reflects the content and applications on their sub-portals. If the statement is inaccurate for a sub-portal's content or applications, the agency must notify both its legal counsel and GTA and must create an accurate privacy statement for their sub-portal. GTA will work with agencies to include their customized privacy statement on their sub-portals.

Agencies will be trained on how to use these CMS templates to maintain their sub-portals. They may only modify their sub-portals through the templates provided on **georgia.gov**.

Security

All agencies that join georgia.gov shall take reasonable steps to ensure the confidentiality, integrity and availability of their content and applications on georgia.gov. This is essential in order to maintain the status of georgia.gov as a trusted provider and source for government services and information. Agencies are responsible for ensuring that the applications incorporate adequate security measures in their design and build.

See the georgia.gov Security Statement, listed under the Important Notices link on the footer of all **georgia.gov** pages, for more information regarding security standards and guidelines, including the use of cookies.

Agencies will be trained on how to use these CMS templates to maintain their sub-portals. They may only modify their sub-portals through the templates provided on **georgia.gov**.

Agencies must also adhere to all security standards and policies, including all GTA-issued Enterprise Information Security Policies, unless specifically granted an exception. They may also develop detailed policies and procedures to handle agency-specific cases.

See the current Enterprise Information Security Policies

Accessibility

All agencies that join georgia.gov shall take reasonable steps to ensure that content and applications on their sub-portals are accessible to constituents. Agencies must become familiar with the principles and guidelines for achieving universal accessibility and must apply them in designing and publishing content to georgia.gov.

See the current Accessibility Policy.

Many accessibility standards are part of the **georgia.gov** CMS templates. Agencies will be trained on how to use these CMS templates to maintain their sub-portals. They may only modify their sub-portals through the templates provided on **georgia.gov**.

See the Sub-Portal Training Manual.

Domain Name Usage

All agencies that join georgia.gov must adhere to the georgia.gov Domain Name Standard. Adherence to the **georgia.gov** Domain Name Standard is required to provide consistency and reliability in the use of **georgia.gov** and to ensure constituents that they are accessing an official State of Georgia government site.

Domain names (such as **georgia.gov**) used in Web sites and e-mail addresses are to uniquely identify computers and networks. The domain name is an online brand - the core of an organization or program's Internet identity. Managers of domain names require name holders to meet certain eligibility requirements and to follow certain standards in using the names. These standards help to preserve the integrity of the name space.

GTA is the official registrant and manager of the second-level managed domains (**georgia.gov**, ga.gov, my**georgia.gov** and myga.gov). For simplicity purposes, this section of the Guide refers only to **georgia.gov**; however, all references to **georgia.gov** apply equally to ga.gov, my**georgia.gov** and myga.gov.

Domain Name Registration Process

GTA will assign a third-level domain name (e.g., gta.**georgia.gov**) to all agencies. Agencies can also request additional third-, fourth- or subsequent-level domain names. A list of Agency Acronyms, currently in use as part of Agency Domain Names, is available online.

Requesting Additional Domain Names

Agencies should follow these steps to request the registration of additional domain names:

1. Review the **georgia.gov** Domain Name Standard available under the Enterprise Policies and Standards channel on gta.georgia.gov.

2. Review the Domain Name Selection section of the standard, as well as the Domain Naming Guidelines prior to finalizing the requested domain name.

3. Submit an email with the requested domain name either to the GTA Traffic Mailbox (traffic@gta.ga.gov) or to the agency's **georgia.gov** project manager. Be sure to include your contact information, as well as any additional information that will help clarify the intended use for the domain name.

Once the registration process is completed, the GTA Domain Registrar will review the request. If approved, GTA will assign domain names in accordance with the **georgia.gov** Domain Name Standard. The domain name will become active within one to two business days after approval.

Agency Domain Name Responsibilities

Agencies are responsible for managing the use of their sub-portal domain names and the paths within such sub-portals in accordance with the **georgia.gov** Domain Name Standard.

See the **georgia.gov** Domain Name Standard**.**

NOTE: Through the **georgia.gov** "business card" effort, GTA requested that agencies provide their preferred acronym for use in constructing the primary sub-portal domain name. Every effort is made to comply with those requests while ensuring that a unique domain name is available and assigned to each agency. See Agency Acronyms for a current list of assigned domain names.

georgia.gov Linking Standard

All agencies that join georgia.gov must adhere to the georgia.gov Linking Standard. Therefore, all links created by agencies for use on **georgia.gov** must comply with the **georgia.gov** Linking standard's Criteria Supporting Inclusion of an External Link. Further, agencies must review any new links against the Criteria Supporting Exclusion of an External Link before placing them on **georgia.gov**. Failure to adhere to the **georgia.gov** Linking Standard could have legal consequences for the agency and/or **georgia.gov**.

An External Link Checklist is below. Additionally, agencies are strongly encouraged to follow the Internal and External Link Guidelines listed in the **georgia.gov** Linking Standard for all links on their sub-portals.

See the **georgia.gov** Linking Standard

Link Disclaimer Statements

All **georgia.gov** pages include a hyperlink to the standard Link Disclaimer included on the Important Notices page. The disclaimer essentially informs constituents that neither the agency nor **georgia.gov** is responsible for the content or policies of any external site to which a link may take the constituent.

See the current Link Disclaimer, which is under the Important Notices link on the footer of all **georgia.gov** pages.

External Link Checklist

Prior to placing external links on a **georgia.gov** page, agencies should:

1. Review the Criteria for Inclusion of External Links in the **georgia.gov** Linking Standard.

2. Review the Criteria for Exclusion of External Links in the **georgia.gov** Linking Standard.

3. Develop and regularly review their own specific policies governing the existence and choice of linked-to external sites. Such policies should ensure that the selection of external linked-to sites is consistent with the agency's mission and with the purpose and structure of its **georgia.gov** sub-portal.

4. Determine, prior to linking, whether the external Web site has any conditions precedent to linking, such as the execution of a license agreement.

5. Limit linking to the external Web site's home page. In other words, refrain from "deep-linking" without first obtaining permission from the linked-to Web site's owner or seeking the advice of counsel.

6. Review the content of all external Web sites prior to linking and frequently thereafter to assure conformity with **georgia.gov** standards (especially the Linking Standard and the Trademark, Service Mark and Copyright Notice).

7. Create, maintain and link to an appropriate link disclaimer statement, such as the one that appears on the **georgia.gov** Important Notices page.

8. Have all external links open in a new separate browser window or, alternatively, use a method that ensures constituents are aware that they are leaving **georgia.gov**.

Use the External Link Checklist to verify compliance of all potential links to external content and applications prior to their deployment to the **georgia.gov** production environment.

Trademark, Service Mark and Copyright Usage

All agencies that join georgia.gov must adhere to the georgia.gov Intellectual Property Display Standard to the extent that third party content is used on their sub-portals. This standard is designed to respect the copyrights (as well as all other intellectual property rights) of all parties, and to protect the state from claims of infringement.

Either all content (including page designs) on georgia.gov must be in the public domain; owned by the state, or the state must possess a valid right, license or permission to use the content. Otherwise, the agency must have express permission from the copyright holders authorizing the content's intended use. Photographs may require not only the copyright holder's express permission but also the permission of the person or persons appearing/depicted in the image.

GTA may request that the agency produce proof of its permission/license to use content and   may remove the content and/or the page upon which it appears, if such proof is unavailable or nonexistent. Failure to submit proof of permission, when requested, may result in the return of an agency's submission or delay in deployment of the content or completion of the **georgia.gov** project.

If GTA receives a claim of infringement, it will notify the appropriate entity so that it may respond to the claim. However, GTA may unilaterally decide to remove the content in question until the issue is resolved.

All **georgia.gov** pages include a hyperlink to the standard Trademark, Service Mark and Copyright Notice found on the **georgia.gov** Important Notices page. Such pages must comply with the **georgia.gov** Intellectual Property Display Standard. The notice essentially informs constituents that content on **georgia.gov** pages is the property of its respective owners and provides the contact information for claims of infringement in accordance with the federal Digital Millennium Copyright Act.

See the **georgia.gov** Intellectual Property Display Standard

See the Trademark, Service Mark and Copyright Notice that is under the Important Notices link on the footer of all **georgia.gov** pages.

The Trademark, Service Mark and Copyright Notice hyperlink is incorporated into the **georgia.gov** CMS templates. Agencies will be trained on how to use these CMS templates to maintain their sub-portals. They may only modify their sub-portals through the templates provided on **georgia.gov**.

See the Sub-Portal Training Manual

NOTE: Agencies are responsible for reviewing the **georgia.gov** Trademark, Service Mark and Copyright Notice to ensure that it accurately reflects the content and applications on their sub-portals. If the **georgia.gov** Trademark, Service Mark and Copyright Notice is not accurate as written for an agency's sub-portal content or applications, the agency must notify both its legal counsel and GTA and must create an appropriate notice for use with the sub-portal.

Content Core Requirements

All agencies that join georgia.gov must adhere to certain requirements regarding the creation, maintenance and deployment of content. The purpose of these requirements is to maximize and leverage the advantages of using an enterprise content management system and to ensure consistency in its use. This sub-section lists those requirements.

1. All agencies that join **georgia.gov** must assign an Agency Content Administrator who will:

   - Be responsible for all agency content.
   - Serve as the agency point of contact to GTA for content management.
   - Establish agency content review procedures.
   - Ensure content compliance with the Requirements Compliance Checklist – For Content
   - See Appendix B.
   - Contact the GTA Project Team to request any requirements waivers or exceptions.

2. Agencies that join **georgia.gov** must:

   - Analyze and align their content with the **georgia.gov** taxonomy.
   - Align/map their information architecture to the guidelines presented in the Information Architecture Methodology document.
   - Identify all images or other file types associated with their content.
   - Organize content and files based on their sub-portal site map.
   - Use the CMS tools and templates provided by **georgia.gov** to create and deploy content.
   - Enter content into the Content Management System as Articles, Files, Images and Teasers.

See the Sub-Portal Training Manual

It is critical to the success of **georgia.gov** that agencies completely test their sub-portals to ensure that links are correct, spelling is correct, and content is in the correct areas. GTA is not responsible for comprehensive testing of the agency-specific functionality of each sub-portal.

In addition, each agency is responsible for maintaining archives of current and past file versions of content. Retention of these versions permits the agencies to produce copies upon request and to replicate recurring content. Agencies are also encouraged to develop detailed policies and procedures for handling backups and archival of agency-specific content.

Applications Core Requirements

All agencies that join georgia.gov must adhere to certain requirements regarding creating, testing, deploying and hosting applications on georgia.gov. The purpose of these requirements is to provide a reliable, predictable, repeatable and efficient process that supports the development and delivery of applications through the georgia.gov infrastructure. This sub-section lists those requirements:

- All applications that will be hosted on or available through **georgia.gov** must adhere to the Application Delivery Process and Checkpoints outlined in Chapter 4 of this Guide, unless an exception is granted.
- All applications will conform to one of the integration models listed in the Integration model section of Chapter 6 of this Guide.
- All applications hosted directly on the **georgia.gov** core infrastructure must be either J2EE or Web Service applications developed with either J2EE or .NET and conform to the state's XML standards.

Support Core Requirements

All agencies that join georgia.gov must adhere to certain requirements regarding the Distributed Portal Support Model. The purpose of these requirements is to ensure that constituents consistently experience **georgia.gov** "no wrong door policy." This sub-section lists those support requirements:

- Agencies that deliver content or applications through **georgia.gov** will participate in the Distributed Portal Support Model. See Chapter 8 for information on the Distributed Portal Support Model.
- Constituent contacts will be resolved as quickly as possible, according to the procedures and standards outlined in any mutually agreed to Service Level Agreements for **georgia.gov**.
- Agencies will be able to receive and respond to e-mails sent directly from constituents or forwarded to the agency via the Portal Contact Center.
- Agencies will provide Call Scripts and Frequently Asked Questions (FAQs) to the Portal Contact Center, as necessary. Sample Call Scripts and FAQs are in Appendix G: Portal Contact Center Call Script Template and Appendix F: Portal Contact Center FAQ Template, respectively.

- Agencies that maintain their own content or applications will use the ServiceCenter® Problem Management Application to receive track and resolve technical problems that require transfer between the Portal Contact Center (Tier 2) and the Agency Contact Center. Any other use of the Problem Management tool is at the discretion of the agency and not required for joining **georgia.gov**. The [Peregrine ServiceCenter® Manual](#) provides agencies with detailed instructions on how to use the Problem Management System.
- Agencies will notify the Portal Contact Center when they make significant changes to their content or applications.
- Agency will operate the Agency Contact Center from 8:00 AM to 5:00 PM on State workdays.

georgia.gov Standards Compliance

Agencies will be responsible for developing their own processes and procedures to comply with **georgia.gov** policies, standards, and requirements. GTA and the Agency Content Administrator will enforce these standards jointly using the GTA Project Review Process and Checkpoints found in Chapter 4 of this Guide.

Requirements Compliance Checklists

Checklists to assist agencies in verifying compliance with the policies, standards, and requirements for content and applications as set forth in this Guide can be found in:

- Appendix B: Requirements Compliance Checklist – For Content
- Appendix C: Requirements Compliance Checklist – For Applications

Section 4 - Processes for Deploying to georgia.gov

Overview

This Chapter describes the process flows for Content Management and Application Development and the roles and responsibilities of the agencies and GTA in coordinating these efforts.

GTA Project Review Process and Checkpoints

To implement a repeatable process for publishing/maintaining content and delivering applications to **georgia.gov**, GTA has created high-level process flows to assist in managing the interaction between GTA and the agencies. Major decision points, or checkpoints, help to reach mutual agreement on content or applications before moving to the next phase of a project or release.

For Content Management, two major decision points have been created:

1. Agreement to Start (ATS) – Agreement between the agency and the GTA Portal Leadership Team will be stated on a general Memorandum of Understanding (MOU) for content and the scope of content to migrate or to create a new agency presence on **georgia.gov**.

2. Agreement to Deploy (ATD) – Agreement between the agency and the GTA Portal Leadership Team that first-time content has successfully completed agency testing and GTA quality assurance (QA) review prior to publication to production.

For Application Delivery, three major decision points have been created:

1. Agreement to Start (ATS) – Agreement between the agency and the GTA Portal Leadership Team will confirm that a project is ready to move from the Planning stage to the Requirements stage. The agency MOU, schedule and project plan are reviewed at this point.

2. Agreement to Implement (ATI) – Agreement between the agency and the GTA Portal Leadership Team will confirm that a project/application has successfully completed the Analysis and Design stage and is ready for the Implementation (Build) stage. Important information regarding the project schedule, standards/requirements compliance and deployment plan are reviewed at this point.

3. Agreement to Deploy (ATD) – Agreement between the agency and the GTA Portal Leadership Team that an application has been fully tested by the agency to meet all functional requirements and tested/certified by the GTA Project Team to meet all GTA technical requirements prior to release to Production.

Quality checkpoints will serve as important milestones throughout the life cycle of a project. Since they depend on a project's size and duration, minimal logical quality checkpoints are in the flows at the end of each project stage. The project managers for the agency and GTA will determine additional checkpoints by project.

Process and Process Steps

This section describes the following:

- Portal Portfolio Identification Process
- Content Management Process
  - Overall Content Management Flow
  - Getting Started
  - Creating/Maintaining Content
- Application Delivery Process

Portal Portfolio Identification Process (PPIP)

The Portal Portfolio Identification Process will be defined in a future release of the Guide. Until defined, agencies will adhere to the Enterprise Web-Based Application Development Platforms and Web-Based Technology Review Standards to inform GTA of customer facing new Web development projects. Submitting the Agency Request for Technology Template (also available on the Enterprise Policies and Standards page) or other appropriate agency documentation will serve to inform and engage the GTA Liaison Team for the ultimate purpose of deploying agency information or services through **georgia.gov**. The Agency Request for Technology (ART) Template is currently a multi-purpose document, not specific to Web-based development. A Web-based development-project request template will be defined in a future release of the Guide.

Upon receipt of the Agency Request, the GTA Liaison Team will provide education on the joining process and joining requirements, gather detailed information on the specific request, and assess the request technically and for project prioritization. The GTA Liaison Team will work with the agency on basic engagement initiation activities. When the project is ready for the planning stage, it will go into either the Content Management Process or Application Development Process.

Content Management Process (CMP)

This section describes the CMP that enables agencies to contribute content to **georgia.gov**. The process consists of two levels:

Level 1 – Supports the interaction between agencies and GTA when creating and publishing content to the **georgia.gov** environment.

Level 2 – Supports agencies in "Getting Started" and Creating/Maintaining content.

CMP – Level 1 (Overall Flow)

This section describes the overall approach and interaction points between GTA and an agency for creating, migrating and maintaining content in **georgia.gov**.
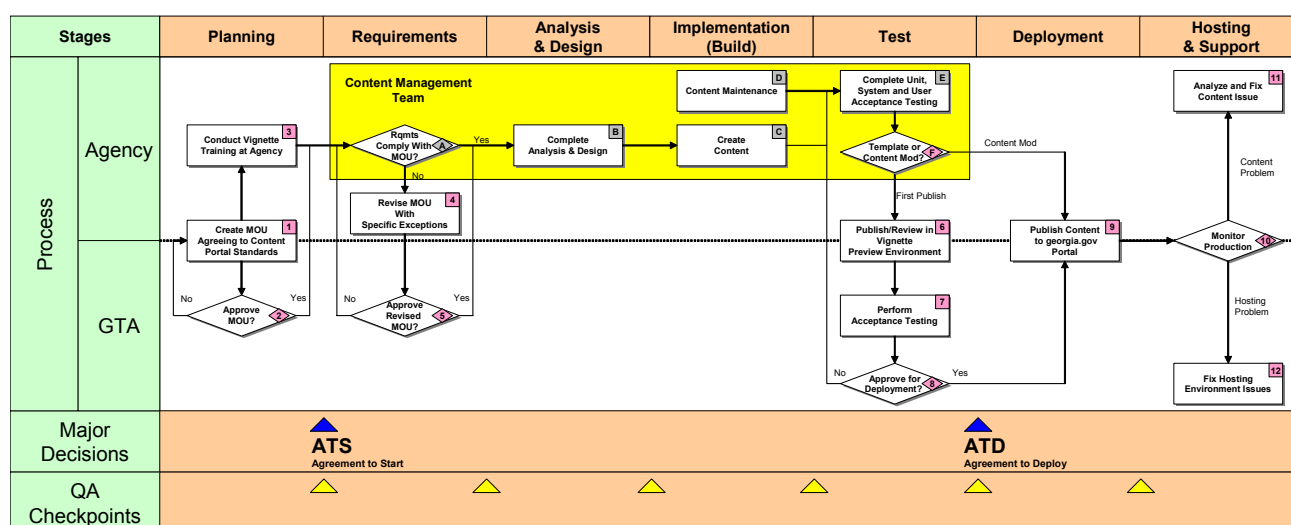
Figure 4-1: Overall Content Management Process Flow

Step #	Process Step	Responsible Party	Description
CMP 1	Create MOU Agreeing to Content Portal	Agency Leadership Agency Sponsor	The Memorandum of Understanding (MOU), provided in Appendix D of this Guide, contains all content-related standards, rules and guidelines that agencies must adhere to when joining

Step #	Process Step	Responsible Party	Description
	Standards		georgia.gov.
			The MOU allows an agency to make changes or request exceptions with proper justification. Once signed and approved by both parties, the MOU becomes the primary "ground rules" if issues are raised between GTA and the agency.
			For content, the MOU needs to be completed only once per agency. However, any time an exception is identified a revised MOU must be filed with and approved by GTA before an agency can contribute content. See Appendix D: Memorandum of Understanding
			Tool: Memorandum of Understanding
CMP 2	Approve MOU	GTA Portal Leadership Team GTA Liaison Team Agency Leadership Agency Sponsor	GTA and the agency work together to determine the rules and guidelines they will follow regarding the terms and conditions set forth in the MOU. Mutual agreement must precede either GTA or the agency beginning to create or migrate content on behalf of the agency.
			Tool: Memorandum of Understanding
CMP 3	Conduct Content Management System Training at Agency	GTA Project Team Agency Project Team	Prior to an agency being able to contribute content to georgia.gov, users representing the agency must be trained on the Content Management tool and on GTA's environment procedures.
			The detailed process flow shown in Figure 4-2 outlines the precursor steps and follow-up steps that content contributors must execute prior to enacting an Agreement to Start content.
			Decision Point: Agreement to Start (Agreed upon by Agency Leadership and GTA Portal Leadership Team)
			Tools: Sub-portal Training Manual, georgia.gov Information Architecture Methodology and the georgia.gov Style Guide
CMP A	Requirements Comply with MOU	Agency Project Team Agency Sponsor	The Agency Project Team conducts the Requirements Definition stage of the project. Any requirements that do not adhere to the original agreement set forth in the MOU must be documented as exceptions and submitted to GTA for approval.
			Tool: georgia.gov Content Development Requirements

Step #	Process Step	Responsible Party	Description
CMP 4	Revise MOU with Exceptions	Agency Project Team Agency Sponsor	The Agency revises the original MOU or the latest Revised MOU with the appropriate exception information and submits to GTA for approval.
CMP 5	Approve Revised MOU	GTA Portal Leadership Team GTA Liaison Team Agency Leadership Agency Sponsor	GTA must approve the Revised MOU before an agency can move into the Analysis & Design stage of a project. The purpose of filing a Revised MOU is to notify GTA, as early as possible, of any exceptions that may affect georgia.gov.
CMP B	Complete Analysis and Design	Agency Project Team	Agency conducts the Analysis & Design stage of the project utilizing Project Management Institute (PMI) or similar project management standards and guidelines.
CMP C	Create Content	Agency Project Team	Agency conducts the Implementation stage of the project utilizing PMI or similar project management standards and guidelines. The detailed process flow shown in Figure 4-3 outlines the process for Agency creation of content. **Tools:** Sub-portal Training Manual, georgia.gov Information Architecture Methodology and the georgia.gov Style Guide
CMP D	Content Maintenance	Agency Project Team	Agency conducts the Implementation stage of the project utilizing PMI or similar project management standards and guidelines. *A detailed process flow for the maintenance of content is in section:* CMP – Level 2 (Getting Started – SET.)
CMP E	Complete Unit, System and User Acceptance Testing	Agency Project Team	Prior to submission of the compliance checklist and/or any publication requests to GTA for Agreement To Deploy, an agency must test the content. Large changes to content are subject to GTA's quality review for Policy and Standards compliance and additional environment testing (if applicable).
CMP F	First Publish or Major Content Modification	Agency Sponsor Agency Project Team GTA Project Team	If an existing georgia.gov user modifies or adds new content, it can be classified for immediate deployment to production. If this is the first time an agency has published content on georgia.gov or if large volumes of content are to be added, the content will require further GTA testing prior to deployment to ensure

Step #	Process Step	Responsible Party	Description
			that all standards and policies have been met.
			The introduction of new content, not as part of a project, requires the agency to review and possibly revise Portal Contact Center FAQs.
			Decision Point: Agreement To Deploy (between Agency Leadership and Sponsor and GTA Portal Leadership Team)
CMP 6	Publish/ Review in CMS Preview Environment	Agency Sponsor Agency Project Team GTA Project Team	Content requires further review and/or testing. Therefore, a review can be performed in the CMS Staging or Preview environment for approval. Since the CMS is already executing in the Production environment and inherently provides this preview feature, no migration is required.
CMP 7	Perform Acceptance Testing	GTA Project Team	Execute quality checks and any environment tests required to confirm that new content will not negatively affect the Production environment.
CMP 8	Approve for Deployment	GTA Project Team Agency Sponsor Agency Leadership	Content has passed GTA testing. It is cleared for deployment to production or returned to the agency for corrections. See Appendix B: Requirements Compliance Checklist – For Content Decision Point: Agreement To Deploy (between Agency Leadership and Sponsor and GTA Project Team)
CMP 9	Publish content to georgia.gov	GTA Project Team Agency Sponsor Agency Project Team	Upon acceptance of ATD, coordinate with agency to publish content to georgia.gov.
CMP 10	Monitor Production	GTA Operations Team Agency Contact Center Agency Project Team	Analyze traffic, response times, load, performance, CPU utilization, Contact Center and Data Center Monitoring Center call volumes and overall environment health. Forward all identified content-related issues to agency. Initiate host environment maintenance procedures for environment- related issues. Manage the content to the objectives established in the SLA.
CMP 11	Analyze and Fix Content Issues	Agency Project Team	Analyze, prioritize, estimate fix time, and schedule resources to address and correct the issue. Assign priority based on its severity. **Tools:** Change Management, Agency - selected

Step #	Process Step	Responsible Party	Description
			Issue Management and Tracking Log
CMP 12	Fix Hosting Environment Issues	GTA Operations Team	Analyze, prioritize, estimate fix time, and schedule resources to address and correct the issue. Assign priority based on its severity. **Tools:** Change Management, Recovery Management, Issue Management and Tracking Log (Problem Management System)

CMP – Level 2 (Getting Started – SET)

This section describes the one-time tasks required by GTA to create the core Content Management environment and management procedures. It also specifies the process for identifying and enabling an agency to create content using the CMS. The steps in the process flow provide the details for CMP 3, "Conduct CMS Training at Agency," of the Content Management Process.
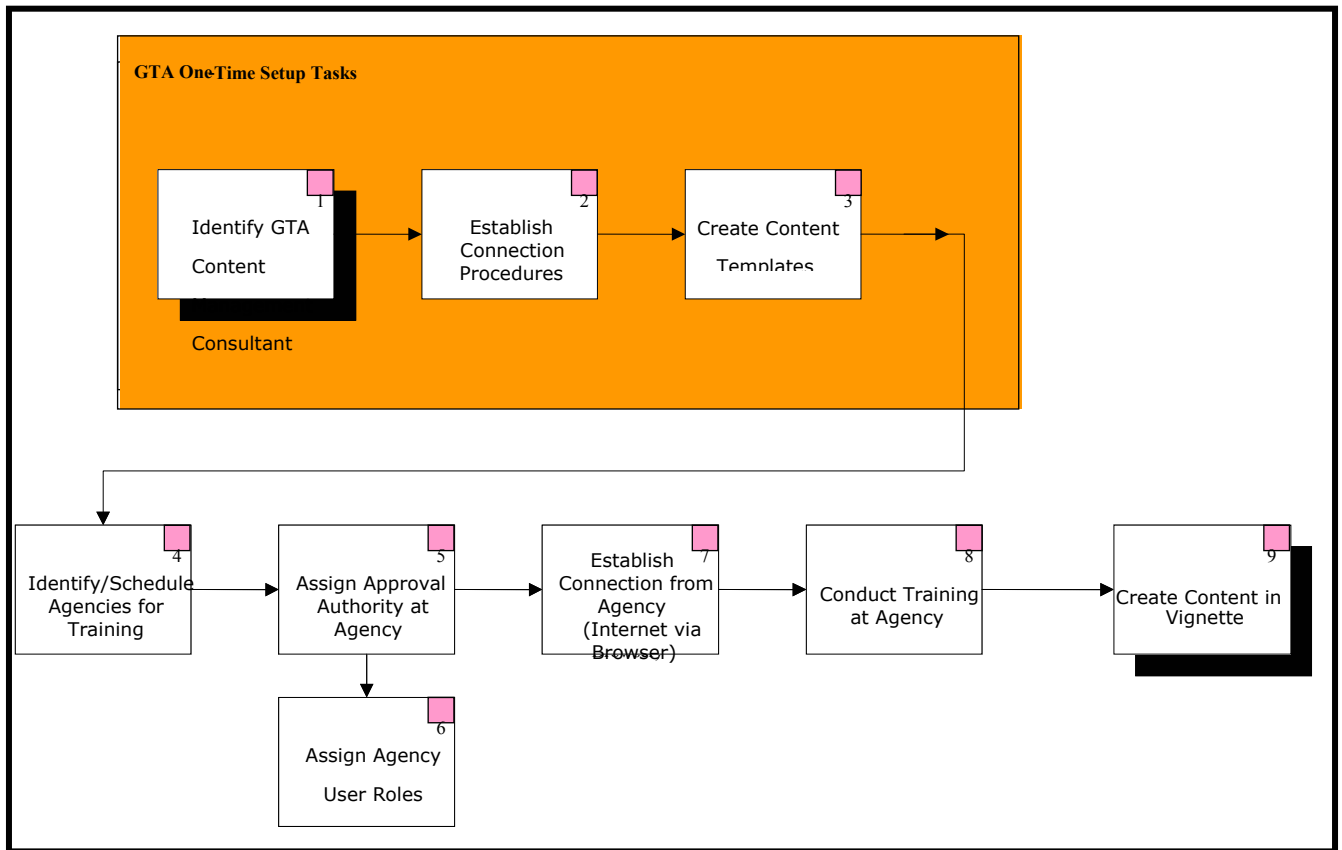
Figure 4-2: GTA Setup and Agency Enablement Process (SET)

Step #	Process Step	Responsible Party	Description
SET 1	Identify GTA Content Management Consultant	GTA Portal Leadership Team	Handle overall Content Management functions and support to the agencies.
			Handle all enterprise-level content and enforcement of taxonomy.
			Grant appropriate authority to Agency Content Administrator.
SET 2	Establish Connection Procedures	GTA Project Team	Determine connection requirements (including access, security, availability, and support) for all agencies and external entities.
			Tool: georgia.gov Content Development Requirements
SET 3	Create Workflow and Content Templates	GTA Project Team	Create and validate templates, directories and workflows for agencies to generate and store content easily within CMS.
			Ensure that all templates comply with the policies and standards set forth in this Guide.
			Update the Sub-Portal Training Manual with the information and steps on how to properly use the templates.
SET 4	Identify/Schedule Agencies for Training	GTA Liaison Team GTA Project Team	Based on interest or scheduling, determine cycles for agencies and external entities to be trained on the CMS.
SET 5	Assign Approval Authority at Agency	GTA Project Team Agency Leadership	Assign Agency Content Administrator. This role assumes responsibility for all content published on behalf of an agency and serves as the Agency Policy and Standards certification authority.
SET 6	Assign Agency User Roles	GTA Project Team Agency Project Team	The GTA Content Management Consultant creates and maintains current Agency user roles, passwords, and IDs. All agencies must have an approval process for content, which includes a final review for certification prior to publication.
SET 7	Establish Connection from Agency	GTA Project Team Agency Sponsor Agency Project Team	Ensure Agency users have both the ability to access Content Management tool and the appropriate authorities to complete their tasks.
SET 8	Conduct Training at Agency	GTA Project Team Agency Project Team	GTA will be responsible for training agencies on: - Content Management maintenance; roles, access and security rights. - Orientation to Policies, Standards, and Styles - Taxonomy principles

Step #	Process Step	Responsible Party	Description
			• Content Management tool (CMS) **Tools:** Sub-portal Training Manual, Information Architecture Methodology, Style Guide.
SET 9	Create Content in CMS	Agency Project Team	Proceed to step CMP C: "Create Content," of the Content Management Process.

CMP – Level 2 (Creating/Maintaining Content – CC)

This section describes the process an agency will follow to create new content or migrate existing content to **georgia.gov**. CMP - Level 2 corresponds to the Agency Content Management process high-level steps defined in the Content Management Process (CMP) Flow section of this Guide (CMP B – Complete Analysis and Design; CMP C – Create Content; and CMP D – Content Maintenance).
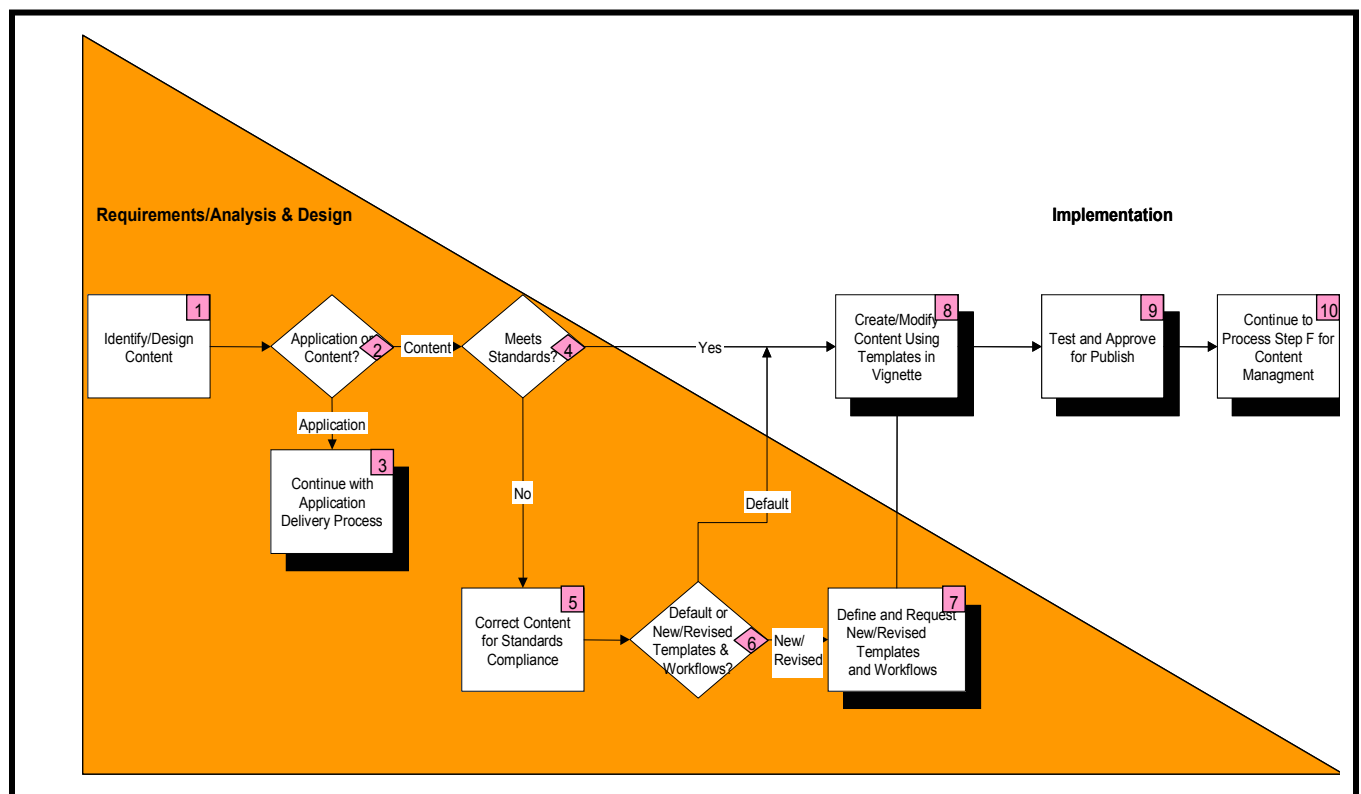
Figure 4-3: Agency Content Creation Process (CC)

Step #	Process Step	Responsible Party	Description
CC 1	Identify/Design Content	Agency Project Team	Determine existing content to be migrated and/or new content. Agency must map current content to georgia.gov taxonomy. **Tools:** Sub-portal Training Manual, Information Architecture Methodology and the Style Guide,
CC 2	Determine if Application or Content	Agency Project Team	Classify new and existing material as either applications or content.
CC 3	Continue with Application Delivery Process	Agency Sponsor Agency Project Team GTA Project Team	See Process Step ADP-1 for Application Delivery in Application Delivery Process (ADP) – Level 1
CC 4	Meet Standards	Agency Project Team GTA Project Team	If existing content is to be migrated to georgia.gov, it check against the georgia.gov standards and policies set forth in this Guide. Any deviation from standards and/or policies will require exceptions to be filed with a Revised MOU or will need to be redesigned or corrected prior to transition into georgia.gov.
CC 5	Correct Content for Standards Compliance	Agency Project Team	Apply standards and policies outlined in this Guide to all content that designated for migration to georgia.gov. Usage of common templates and the CMS should provide the structure necessary to minimize rework efforts.
CC 6	Determine if Default or New/ Revised Templates & Workflows	Agency Leadership Agency Sponsor	Determine whether the agency will utilize the templates and workflows defined in the georgia.gov CMS or if they need to request a revised or new template from GTA.
CC 7	Define and Request New/ Revised Templates and Workflows	Agency Project Team Agency Sponsor GTA Project Team	GTA will create all new or revised templates to comply with the policies and standards set forth in this Guide. Standard templates and the procedures contained within the Sub-Portal Training Manual will be a starting point for agencies to define their Web presence. **Tool:** Sub-Portal Training Manual
CC 8	Create/Modify Content Using CMS Templates	Agency Project Team	Create new content or recreate existing content in the CMS using the supplied templates. **Tool:** Sub-Portal Training Manual
CC 9	Test and Approve for	Agency Project Team	Conduct all levels of testing against the content. When complete, certify that the content meets all

Step #	Process Step	Responsible Party	Description
	Publish	GTA Project Team	standards and policies set forth in this Guide. *NOTE:* List and justify any exceptions and submit to GTA for approval prior to publishing.
CC 10	Continue to Process Step F –for Content Management	Agency Sponsor GTA Project Team	Process Step CMP F: First/Major Publish or Content Mod? - Determines whether content goes directly to production, must be quality reviewed by GTA due to exceptions to compliance, or if this is the agency's first time to submit content using the CMS.

Application Delivery Process (ADP) – Level 1

This section describes the overall approach and interaction points between GTA and an agency for creating, migrating and maintaining applications in **georgia.gov**.
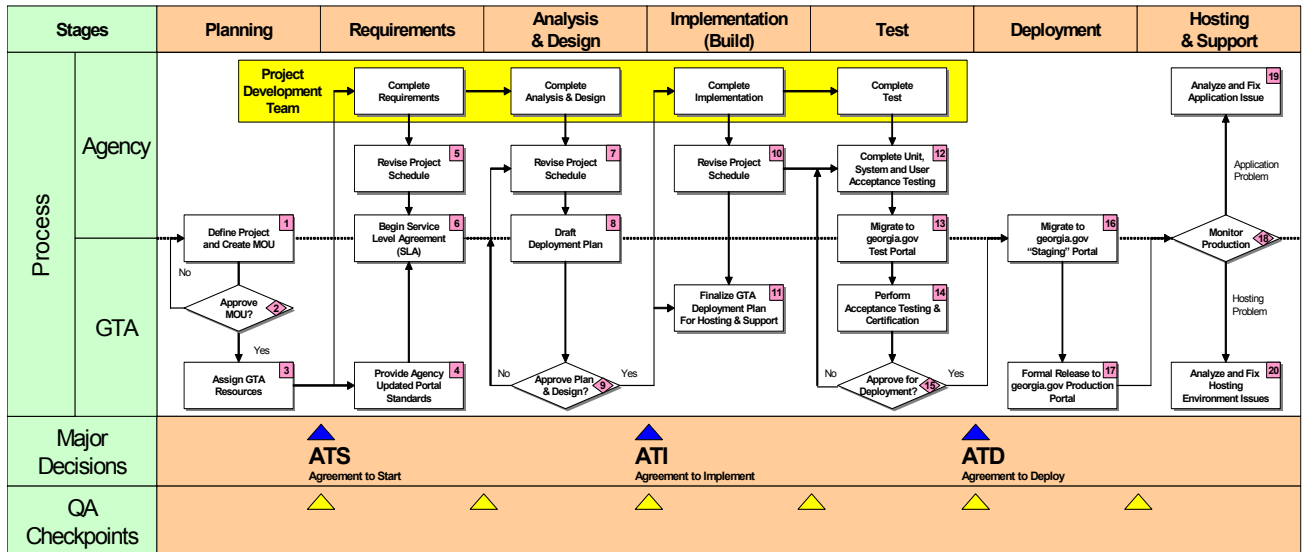
Figure 4-4: Application Delivery Process (ADP)

Step #	Process Step	Responsible Party	Description
ADP 1	Define Project and Create MOU	Agency Leadership Agency Sponsor Agency Project Team GTA Liaison Team GTA Project Team Project Manager	The Memorandum of Understanding (MOU), provided in this Guide, contains all related standards, rules and guidelines that agencies must adhere to when joining georgia.gov. See Appendix D: Memorandum of Understanding • The MOU allows agencies to make changes or request exceptions with proper justification. Once signed and approved by both parties, the MOU becomes the primary "ground rules" when issues are raised between GTA and an agency. • For subsequent applications, or for exceptions, a Revised MOU must be filed with and approved by GTA before an agency can continue to develop the applications. • If the agency plans to contract with a Portal Development Services (PDS) vendor, it should follow the GTA Procurement process for using

Step #	Process Step	Responsible Party	Description
			the PDS Contract. The project schedule will need to reflect time to conduct procurement. • Agency or agency subcontractor will create a detailed Project Plan laying out the scope, resources, schedule, work plan, costs, assumptions, risks and risk mitigation. **Tools:** Memorandum of Understanding, Project Plan, and (optionally) Statement of Need Template available from Procurement
ADP 2	Approve MOU	GTA Portal Leadership Team GTA Liaison Team Agency Leadership Agency Sponsor	GTA and agency work together to determine the rules and guidelines both will follow regarding the terms and conditions set forth in the MOU. Mutual agreement must be achieved before either can begin to create or migrate applications. A charge-back estimate based on usage and classification of the application will be loaded into the forecasting model. **Tools:** Memorandum of Understanding, Forecast Charge-back
ADP 3	Assign GTA Resources	GTA Portal Leadership Team GTA Project Team Project Manager	GTA will schedule and allocate the required resources and skills outlined in the GTA project statement of work to support the delivery of an agency's application. These resources and skills include personnel, hardware and software at the rates defined by GTA. **Major Decision:** ATS (Agreement To Start) by GTA Portal Leadership Team, GTA Liaison Team, Agency Leadership, and Agency Sponsor
ADP 4	Provide Agency Updated Portal Standards	GTA Project Team	Provide standard georgia.gov templates, general georgia.gov requirements, test conditions and expected results to supplement an agency's requirements and testing stages of the project. The goal is to provide input collected from existing projects and "lessons learned" to help eliminate common errors and delays.
ADP 5	Revise Project Schedule	Agency Project Team GTA Project Team	Prior to the completion of the requirements stage, updates will be made to the project schedule, if necessary, and will be communicated to all GTA parties through the Agency Project Team and GTA Project Team. The purpose is to keep all parties informed of any changes to the schedule so that adjustments can be made from a planning and management perspective early in the process. Such adjustments minimize the impact of the schedule change on other project efforts. GTA

Step #	Process Step	Responsible Party	Description
			Project Team activities should be incorporated into the project schedule at this point.
ADP 6	Begin Service Level Agreement (SLA) Process	Agency Sponsor GTA Project Team	Once the application and development requirements have been defined, the requirements relative to Hosting and Contact Center support will be captured and summarized in a Service Level Agreement (SLA) that represents the support arrangement agreed upon by both GTA and an agency. The SLA information will be finalized prior to deployment. **Tool:** Service Level Agreement for Hosting and Portal Contact Center
ADP 7	Revise Project Schedule	Agency Project Team GTA Project Team	Prior to completion of the requirements stage, updates will be made to the project schedule, if necessary, and will be communicated to all GTA parties through the Agency Project Team and GTA Project Team. The purpose is to keep all parties informed of any changes to the schedule so that adjustments are made from a planning and management perspective early in the process. Such adjustments minimize the impact of the schedule change on other project efforts. At this point, the GTA Project Team should have a complete understanding of the requirements of the system and can begin reviewing, finalizing and scheduling the effort and costs of accepting this system into production.
ADP 8	Draft Deployment Plan	Agency Project Team GTA Project Team	A deployment plan outlines the deployment schedule, roles, expectations, rollback procedures, installation procedures, etc. All deployment tasks and responsibilities are defined and assigned in this step. In addition, create the Production Acceptance Test Plan. It includes more than a single acceptance test performed when the system is first placed into production. Rather, whenever a Change Request is processed that might affect functionality, the GTA Project Team re-executes these tests to help ensure the application is functioning as expected (Regression Testing).
ADP 9	Approve Plan & Design	GTA Project Team Agency Project Team	The Project Teams approve the overall implementation, testing and deployment plans and schedule. Such approval includes a quality review and signoff of design against standards and policy compliance.

Step #	Process Step	Responsible Party	Description
			Major Decision: ATI (Agreement To Implement) by GTA Portal Leadership Team, GTA Liaison Team, Agency Leadership, and Agency Sponsor.
ADP 10	Revise Project Schedule	Agency Project Team GTA Project Team	Prior to the completion of the implementation stage, updates will be made to the project schedule, if necessary, and will be communicated to all GTA parties through the Project Manager of the Agency Project Team and the Project Manager of the GTA Project Team. The purpose is to keep all parties informed of any changes to the schedule so that adjustments can be made from a planning and management perspective early in the process. Such adjustments minimize the impact of the schedule change on other project efforts.
ADP 11	Finalize GTA Deployment Plan for Hosting and Support	GTA Project Team Agency Project Team	Allocate and assign GTA-specific resources required to support the testing and deployment of the application, according to availability and defined schedule. Determine a new estimate by re-evaluating charge-back forecast incorporating updates and re-classification (if applicable). The GTA Project Team will finalize the "Staging" environment for stress testing.
ADP 12	Complete Unit, System and Client Acceptance Testing	Agency Project Team	Client-level test the applications to confirm and satisfy all functional and technical requirements (implies full acceptance of the application by an agency.) Completion of these tests along with certification by an agency is necessary before GTA can start the Acceptance Test. **Tool**: Requirement Compliance Checklist
ADP 13	Migrate to georgia.gov Test Portal	Agency Project Team GTA Project Team	Migrate the application and its related components from the Development environment to the Test environment for GTA Acceptance testing. The Agency Project Team and the GTA Project Team will coordinate the migration.
ADP 14	Perform Acceptance Testing & Certification	GTA Project Team Agency Project Team	GTA Project Team executes tests for standards and policy quality review for compliance, performance/load testing, browser and accessibility compliance to certify the application for deployment to the georgia.gov Production environment. Identify and communicate all defects to the Agency Project Team for correction. The GTA Project Team and/or an Independent Verification & Validation (IV&V) team will execute additional infrastructure tests to certify the

Step #	Process Step	Responsible Party	Description
			application and approve it for release. Certification testing includes: • Operating System Compatibility Testing • System Platform Compatibility Testing • Application Compatibility Testing • Application Security Testing
ADP 15	Approve for Deployment	GTA Portal Leadership Team Agency Leadership Agency Sponsor GTA Project Team Agency Project Team	The final determination to deploy an application to production is based on the following: • Results of acceptance testing by GTA • Agreement on the SLAs for Hosting and Contact Center (including completed scripts and appropriate runbook updates with contact and escalation procedures), signatures required, • Approved final test plan, and • Full certification for standards for Applications Running on **georgia.gov** Achieve agreement between an agency and GTA at this stage to make a 'Go/No Go' decision to deploy the application. **Tools:** All previous deliverables **Major Decisions:** ATD (Agreement to Deploy) between GTA Portal Leadership, GTA Project Team and Agency Leadership; this decision determines a "Go/No Go" decision and a "Go Live" date.
ADP 16	Migrate to georgia.gov "Staging" Portal	Agency Sponsor GTA Project Team Agency Project Team	Upon acceptance of the ATD: 1. Coordinate with an agency according to the request and procedures to migrate applications to the "Staging" environment for a defined period of extensive monitoring by the GTA Project Team before formal release to production. This step entails migration of the application and related components required to support the function of the application in the georgia.gov production environment. An Agency Project Team and the GTA Project Team coordinate this effort. 2. Finalize the charge-back amount for ongoing hosting and support of the application.
ADP 17	Formal Release to georgia.gov Production	Agency Sponsor GTA Project Team Agency Project Team	Upon acceptance of the ATD, and verification of proper function in the "Staging" environment, coordinate with an agency according to the

Step #	Process Step	Responsible Party	Description
	Portal		request and procedures to migrate applications to the georgia.gov Production environment. This step entails migration of the application and related components required to support the function of the application in the georgia.gov Production environment. An Agency Project Team and the GTA Project Team coordinate this effort.
ADP 18	Monitor Production	GTA Operations Team	Analyze traffic, response times, load, performance, CPU utilization, Contact Center and Data Center Monitoring Center call volumes and overall environment health. Forward any content or application-related issues to agency. For environment-related issues, initiate host environment maintenance procedures. Manage the application to the objectives established in the SLA.
ADP 19	Analyze and Fix Application Issues	Agency Sponsor Agency Project Team	1. Analyze, prioritize, estimate fix time, and schedule resources to address and correct the issue. 2. Assign priority based on the issue's severity. 3. Ensure that the latest copy of the content from the production environment is used for correction and submit it back through the migration cycle as appropriate. Emergency fixes may bypass development and test in extreme cases only, must meet minimum production acceptance criteria and have dual approval signatures. **Tools:** Change Management, Issue Management and Tracking Log
ADP 20	Analyze and Fix Hosting Environment Issues	GTA Operations Team	1. Analyze, prioritize, estimate fix time, and schedule resources to address and correct the issue. 2. Assign priority based on its severity. **Tools:** Change Management, Recovery Management, Issue Management and Tracking Log

Overall Roles and Responsibilities

This section provides an overview of GTA and agency roles and responsibilities for each of the following processes:

- Content Management
- Application Delivery

Content Management – Roles and Responsibilities

Role/Team	Responsibility for Content Management	Process Steps
GTA Portal Leadership Team	• Approve the project MOU. • Participate in major decisions. • Provide guidance to agencies regarding policies, standards and costs associated with use of **georgia.gov**. (GaNet Director) • Determine rules and guidelines to govern content on **georgia.gov**; e.g., 'look & feel' (GaNet Director) • Allocate GTA resources across agency project demands. (Division/Office Director)	CMP 2,5, SET 1
GTA Liaison Team	• Provide recommendations for project MOU to GTA Leadership Team. • Assist in revision and approval of MOU. • Be aware of the agency content publish effort with the agency teams.	CMP 2,5 SET 5
GTA Operations Team	• Conduct capacity planning, hosting, and overall support and maintenance for the **georgia.gov** environments (Information Resource Management - IRM/GaNet) • Monitor agency content and report issues/bugs to Agency Project Team. (GaNet Creative Group, IRM, Portal Contact Center)	CMP 10,12
GTA Project Team	• Coordinate training for agencies and external entities on Content Management tool use. (GaNet Creative Group) • Coordinate and manage the publishing of first-time content. (GaNet Creative Group) • Provide guidance on exceptions to standards and develop new **georgia.gov** templates. (GaNet Creative Group) • Create custom templates. (GaNet Creative Group) • Assist agencies and provide consultative guidance in initial use of the georgia.gov CMS for publication of content. • Address deployment issues. • Coordinate and communicate the processes	CMP 3,F,6-9 SET 2-6,8,9

Role/Team	Responsibility for Content Management	Process Steps
	for agencies to contribute content. • Communicate standards, policies and templates to the agencies as developed. • Coordinate GTA resources required to support an agency's resource request.	
Agency Leadership	• Develop overall agency strategy. • Participate in major decisions (ATS and ATD). • Approve final project MOU.	CMP 1,2,5,8 SET 6 CC 6
Agency Sponsor	• Provide day-to-day oversight of project schedule and plan. • Serve as Agency Liaison to GTA agency. • Own content. Coordinate with GTA on style and template issues. • Coordinate publishing of content. • Certify that content meets MOU expectations. • Approve content.	CMP 1,2,A,4,5,F,6,8,9 SET 8 CC 3,6,7,10
Agency Project Team	• Deliver and test content. • Create content. • Conduct accessibility and browser testing. • Support agency Contact Center capabilities.	CMP 3,4,A-F,6,8-11 SET 7-10 CC 1-5,7-9

Application Delivery – Roles and Responsibilities

Role/Team	Responsibility for Application Delivery	Process Steps
GTA Portal Leadership Team	• Approve agency project MOU. • Participate in major decisions (ATS, ATI, and ATD). • Sign SLA. • Maintain the overall (enterprise-wide) vision of **georgia.gov** strategic direction and conduct expansion planning to maximize services offered. • Define enterprise components. • Negotiate all hardware/software agreements on behalf of the agencies. • Define and maintain processes, standards and guidelines for joining **georgia.gov**. • Allocate GTA resources across agency project	ADP 2,3, 15

Role/Team	Responsibility for Application Delivery	Process Steps
	demands.	
GTA Liaison Team	• Provide recommendations for an agency project MOU to GTA Portal Leadership Team. • Communicate new enterprise modules, templates, etc., and their usage to agency for inclusion in projects/applications. • Assist Agency Project Team management.	ADP 1-2,
GTA Operations Team	• Conduct capacity planning, hosting, Contact Center, and overall support and maintenance of the **georgia.gov** environments. • Manage SLA.	ADP 18,20
GTA Project Team	• Oversee and implement the project planning, application delivery, and deployment processes. • Create enterprise components and/or common services required by agencies (e.g., EAI connectors and common routines). • Consult with and provide technical expertise to Agency Project Team to support the Application Delivery process. • Allocate GTA Project Team resources to application projects according to staffing requirements of the agency. • Coordinate the SLA acceptance process. • Address deployment issues. • Conduct quality checkpoints (at a minimum, at the end of each stage).	ADP 3-11, 13-17,20
GTA Finance Division	• Incorporate revisions to forecasting and charge-back tools to reflect increase in applications. • Provide estimated costs to agencies based on revisions. • Provide periodic cost forecasts to agencies • Manage the charge-back and forecasting efforts, in conjunction with the identification process.	ADP 11
Agency Leadership	• Develop overall agency strategy and vision. • Participate in major decisions (ATS, ATI, and ATD). • Approve and sign SLA and MOU. • Provide resolutions to agency-specific issues and work with GTA to resolve **georgia.gov**-related issues caused by an agency application/project.	ADP 1,2, 15
Agency Sponsor	• Serve as liaison to GTA for the agency in such	ADP

Role/Team	Responsibility for Application Delivery	Process Steps
	matters as: project management; standards compliance and exceptions; coordination of availability of environments, enterprise components, deployment efforts, and issue/bug resolution efforts; requests for GTA resources for projects; and schedule management. • Serve as business and technical owners of the application. • Coordinate with GTA Project Team during Acceptance Testing and Certification.	1,2,5, 6,,15- 17,19
Agency Project Team	• Oversee the Requirements, Analysis & Design, Implementation, and Testing stages as well as the final approval for deployment of an application. • Identify and correct all bugs in the software. • Utilize common components for services. • Implement standards and policies throughout the application. • Manage the project schedule and deliverables. • Provide internal Quality Assurance of the application. • Manage the project lifecycle. • Define SLA requirements.	ADP 1,5,7- 17,19

Section 5 - Tips and Techniques

Overview

The information in this chapter is designed to provide agencies with helpful information on topics either generally applicable to information made available via the Web and/or information on unique topics or features effecting **georgia.gov**. GTA expects the information within this Chapter to expand and change over time. Agencies are strongly encouraged to make suggestions for the addition or revision of content and topics of this Chapter.

Content Design and Drafting Considerations

The following sections provide guidance to agencies on how to produce/modify Web content so that it is useful to as many constituents as possible. Agencies and their constituents are the ultimate decision makers regarding the value of content. Therefore, once an agency has determined which content to publish, the next consideration should be how to present that content on the Web.

Joining **georgia.gov** enables agencies to create a consistent user experience for constituents. The tools and processes described in this Guide can be used to provide that experience; for example, to ensure a consistent look-and-feel, all agencies must use the Content Management System and predefined CMS templates to enter and update their content. A training guide, complete with screenshots, is provided to show how to use the Web-based CMS application to publish content.

See the Sub-Portal Training Manual

Another tool within **georgia.gov** is the Information Architecture Methodology document. It provides information on how to categorize content according to **georgia.gov**'s best practices.

See the **georgia.gov** Information Architecture Methodology document.

Ultimately, agencies are responsible for how their content is presented. This Guide describes the standard tools and processes **georgia.gov** provides to aid them in their efforts.

Agency Constituents and georgia.gov Constituents

Any agency that designs content to be presented on the Web must first understand its constituents. At a minimum, agencies must be able to answer the following questions about both the content and their constituents:

- Who is going to read this?
- What will they want to know?
- What problems do they want to solve?

Once an agency gains an adequate understanding of its constituents, content may be designed/redesigned and categorized according to **georgia.gov**'s best practices.

See the **georgia.gov** Information Architecture Methodology document.

Who is going to read this?

An agency's constituents may come from very different groups (e.g., citizens; businesses; or other state, federal or local governmental agencies). Laws regulating their business functions, by historical practice or by public demand, may define such constituents. Regardless of the broad spectrum and origin of constituents served by Georgia agencies, all are looking for the same thing - substantive, useful and well-presented information and services. Therefore, an agency's content design must factor, account for, and reflect the diversity of its constituent groups.

Although an agency's traditional constituents might be a focused group, the **georgia.gov**'s Content Management System and Information Architecture Methodology will make the content available across the enterprise in contexts outside of the agency's Web presence. (For example, information about immunizations can be viewed in an enterprise-level constituent service request for information on school registration, travel, or health updates.) Therefore, content should be written in such a way that all constituents (or the broadest number practicable) accessing **georgia.gov** can clearly understand the information that they encounter.

The types of users who access **georgia.gov** include, but are not limited to:

- Georgia residents of all ages
- Government officials and their staffs
- Investors and the international business community
- Journalists, students and academics researching government activities
- Members of the press
- Miscellaneous Internet users
- Professionals complying with State of Georgia regulations
- Professionals looking for information needed to complete their jobs

- State of Georgia employees
- Taxpaying users of State of Georgia services
- Business prospects
- Tourists and potential tourists

What will they want to know?

Typically, constituents want to know what services are available to them, their families, and/or their businesses; how to obtain information regarding past and future events relative to an agency or an area of interest; and who to contact when they have questions or problems.

Agencies can increase constituent satisfaction and decrease Contact Center calls by providing Web content that addresses such questions as:

- What does the agency do?
- What is the agency's official mission?
- What types of programs and services does the agency offer to the public and how can the public access them?
- How can the public contact the agency (e.g., via regular mail, e-mail, telephone, fax, or in person)?
- How is the agency organized?
- What are the agency's hours of operations?
- Are there local agency offices?
- Does the agency have 24-hour emergency numbers or problem resolution lines?
- How can a vendor do business with the agency?

What problems do they want to solve?

An agency can increase constituent satisfaction and decrease Contact Center calls by providing Web content and services that address such problems/concerns as:

- Filing a complaint
- Responding to a complaint
- Paying a fine
- Applying for a permit or license
- Applying for a program
- Requesting information about a program
- Requesting general help or help on a specific issue

Getting Started (Planning the Initial Content)

Prior to joining **georgia.gov** and publishing content on its sub-portal, agencies must:

- Locate all potential electronic sub-portal content. Non-electronic content may be either manually typed or scanned. An agency's GTA Liaison (or designated team member) may provide additional information or help with this effort.
- Organize the sub-portal content in accordance with the **georgia.gov** Taxonomy Guide as indicated in the **georgia.gov** Information Architecture Methodology document.

See the **georgia.gov** Information Architecture Methodology document.

- Identify the agency's authorized content owner.
- Attend **georgia.gov** and other appropriate Web development and training sessions.

Making Content Easy to Read and Understand

Web content differs significantly from printed text. Studies show that most constituents skim Web content in small bulleted sections rather than reading every word in depth, as they tend to do with printed text.

Tips for keeping **georgia.gov** content clear and understandable include:

- Keep content as short as possible. If it covers more than one screen, put the main points at the top of the screen and bullet the information that will appear further down the Web page.
- Design content as though constituents will read it out of order (non-sequentially). Avoid words such as "continued from," "return to," "go back to," "next," and "previous."
- Use the navigation schemes prescribed in the **georgia.gov** templates to provide consistency of interaction for constituents.
- Avoid moving images. Scrolling and/or blinking text may discourage constituents from reading all of the material. Constantly moving images can also distract from important content, add to download time, and stress browser capabilities.
- Avoid linking to sections within a document. Separate files are easier to maintain if material will be changed or updated regularly.
- Avoid using links as footnotes. Constituents may not know whether the links are to critical content or just to a comment or reference.
- Summarize content, whenever appropriate.
- Use plain backgrounds and simple layouts to improve readability of text.
- Provide a text-only index or site map.
- Include both textual and graphical navigation aids.
- Do not abbreviate dates; for example, use December 1, 2000 rather than 12/1/00.

Writing and Editing

The following list of writing/editing tips provides a summary of issues to consider when creating and designing Web content that will be accessible to all constituents.

- Many words and phrases detach the reader from the subject or describe the existence of the topic rather than the topic itself. Avoid the following buzzwords:
- − Check it Out!
- − Cool!
- − Hot!
- − Hot list of Cool Sites!
- − Neat!
- − Surf!
- Avoid the use of "under construction," when possible. One of the goals of **georgia.gov** is to provide constituents with content that "has been" developed, not content that is "going to be" developed. Content will not appear live on **georgia.gov** until it is properly approved, ready and launched.
- Avoid extensive computer or government jargon. Many constituents are not familiar with computers and/or state policies.
- Avoid the use of "Click here."   Some constituents may not use a mouse, and such a designation violates principles of accessibility. As an alternative, hyperlink the subject of the link.
- Check spelling prior to publishing content.
- Have content proofread by a knowledgeable person.
- Test all links. Missing or incorrect links can frustrate the constituent.
- Review content regularly to ensure that the information remains current. As a best practice, the appropriate content owner should internally certify the validity of agency content periodically.
- Remove old or unwanted files.
- Monitor all content for sexist, racist, or other inappropriate references. For example, "Men at work" would be an inappropriate phrase to use in designating that content is under construction.
- End all sentences, headers, list items, etc., with a period or other suitable punctuation.
- Avoid using side-by-side presentation of text (e.g., columns and tables).
- Provide alternate versions of forms. Such alternatives might include:
- a simple list or paragraph of what is needed to submit a form entry
- a link to a mailto: feature
- an appropriate e-mail address
- Minimize the number of hyperlinks in a single line of text; one hyperlink is best. Consider vertical lists for links, wherever possible.
- Avoid/limit bitmap images of text, unless a textual alternative is also provided.
- Consider beginning lists with a descriptive identifier and the number of items, to make clear what the list represents and its total length. Use numbers instead of bullets as an aid to help users remember items that interest them.
- Provide meaningful and descriptive text for hyperlinks.

Copyright Notices

Agencies should consider including Copyright notices to set forth the permitted uses for content on their sub-portals. Inclusion of such notices will inform constituents as to whether they may copy, print or otherwise use the content available on the agency's Web pages. Additionally, inclusion of such notices will reduce inquiries related to constituent use of content.

Copyright notices will vary. GTA suggests the following form notices for agencies to consider or adapt for their purposes:

- **Basic Notice** –All information belongs to the agency:

    Copyright © 200__ AGENCY NAME All Rights Reserved.

- **Basic Notice 2** – All information belongs to the agency, and the agency has specific permission for noncommercial use.

Copyright © 200__ AGENCY NAME All Rights Reserved. Permission is hereby granted to view copy or save the material on this site for your future personal noncommercial reference. Further duplication, modification, use or distribution of the material is prohibited without the express written permission of AGENCY NAME.

- **Basic Notice with Specific Terms of Use** – Appropriate where all information belongs to the agency and the agency grants permission for use, as long as specific conditions or restrictions are met. (The list of conditions or restrictions can be modified as necessary):

    Copyright © 200__ AGENCY NAME All Rights Reserved.

    Permission is hereby granted to view, copy, print, and distribute material from this site under the following restrictions and limitations: 1) The material is used for information only; 2) The material is used for non-commercial purposes only; 3) all copies, either in whole or in part, include AGENCY NAME's copyright notice.

If the page or site contains third-party copyrighted material, the agency should verify whether any notice requirements have been imposed by the respective copyright owners before finalizing the copyright notice.

See section 3.1.9 Trademark, Service Mark and Copyright Usage and the

georgia.gov Intellectual Property Display Standard.

Designing for Different Browsers

Designing Web pages to be readable by numerous constituents, regardless of the type of browser they use, requires compliance with existing Web standards. Since HTML is continually changing and different browsers support different elements, it is important to ensure that pages are readable and accessible in most current browsers. When a browser encounters elements it does not understand or cannot display, some of the page content may be lost.

HTML standards were written so that new extensions to older features are safely ignored and the original feature can still function normally. In addition, new features are written with alternative displays for browsers that do not support them. Many elements of HTML cannot be displayed or can be turned off in browsers that were written with the knowledge of these elements (e.g., images, Java, and frames). Providing an alternative message to users who either cannot see those elements or have turned them off broadens the audience of an agency's Web site to include constituents using varying types and versions of browsers.

GTA does not design for specific browsers but rather for the standards as defined by the W3C (World Wide Web Consortium). Currently, GTA supports and develops at HTML 4.0 transitional standards. Design pages to provide an alternative message to those who cannot see those elements or have turned them off.

Additionally, the **georgia.gov** Linking Standard requires all external links to open in a new browser window. To achieve this, add an attribute within `<a>` that reads: `target="_blank"`. Here is an example: `<a href="www.Web site.com" target="_blank">`

See Chapter 3 and the **georgia.gov** Linking Standard for more details.

Appropriate Use of File Types

Web browsers in their native file formats can view many common file types. However, there are often issues or limitations that an agency should consider when using certain file formats on **georgia.gov**. The table below summarizes some of these usage considerations:

APPROPRIATE USE OF FILE TYPES		
File Type	**Appropriate Use**	**georgia.gov Tip**
PDF (Adobe Acrobat: Portable Document Format)	Documents that retain formatting, such as fonts, artwork, layout and links, regardless of user's computer or platform. Good for printable documents.	**Recommended file format** for documents that will be available on **georgia.gov** but not as HTML content entered through the **georgia.gov** Content Management System.
Doc (Microsoft Word)	Text documents that may contain images and links. Depending on font on the end user's machine, it may not render correctly. Can be converted into HTML for publication on the Web. Also good for printable documents.	When converting to HTML, make sure all necessary tags are removed as the **georgia.gov** Content Management System will apply the proper tags to content. A good and easy method is to cut and paste content into a text editor such as Notepad and then copy directly into the CMS. This will ensure that all unnecessary tags are removed and content will display properly.
Spreadsheet (Microsoft Excel) Microsoft PowerPoint (.ppt)	Documents that contain graphs, charts, rows & columns with figures and formulas, etc. Presentation slides	Conversion to HTML not recommended due to formatting and version compatibility issues that may prevent a constituent from being able to view print or download the content. Suggest conversion to PDF for publication on **georgia.gov**.
JPEG	Photographs	Try to keep image to 72 dpi and file size to 30K or smaller
GIF	Logos, clip art, images with uniform color, images that require transparency. Should not be animated.	Try to keep image to 72 dpi and file size to 20K or smaller

APPROPRIATE USE OF FILE TYPES		
File Type	**Appropriate Use**	**georgia.gov Tip**
Flash (Macromedia animation/interactivity)	Animations (including sound), multimedia presentations, interactivity (such as games, polls, questionnaires, etc.) and navigation. Not all users may have the required plug-in.	Can be added but not currently configured to automatically handle this file type.
Wav QuickTime Real Audio BMP	Various audio and video formats	The **georgia.gov** Content Management System is not currently configured to accept these file types.

Scanned Documents

Save scanned documents in JPEG or GIF format. These scanned files should not be placed in any of the preceding file types unless as supplemental material. For example, an annual report may contain text as well as supporting graphics; but simply scanning a memo and placing it in a Word document by itself is unnecessary. Link it to the file directly.

Executable Files

Agencies should not offer executable (.exe) files for constituents to download directly. Rather, compress executables using a standard compression tool, such as WinZip (PC) or Stuffit (Mac), and published in the compressed format. Provide detailed directions to constituents for how to download and uncompress the files.

Converting Documents for Use on the Web

Many word processing and spreadsheet applications support the conversion of documents from their native form to HTML or PDF. PDF is the recommended file format for documents that are not going to be entered as HTML into the **georgia.gov** Content Management System. Agencies can then publish these files to their Web page for downloading by constituents.

Conversion of Documents to HTML for Use in the CMS

Conversion of specific documents to HTML is a simple process for many common file types, such as Microsoft Word files (.doc). However, GTA does not recommend this approach because the simple conversion process creates large file sizes and unnecessary code. These conversions do not preserve formatting attributes and advanced features of Microsoft Word, which can cause unexpected printing results and readability issues. Additionally, depending on the version of software in which the original file was created there may be other compatibility issues. In short, conversion to HTML may lead to unexpected results and is not recommended for specific documents that will be made available to constituents via **georgia.gov**.

However, GTA does encourage content to be created in HTML for the the CMS system and displayed via the portal rather than in document form such as Microsoft Word.

Conversion to Portable Document Format files (PDFs)

GTA recommends that if agencies find it necessary to make documents available to their constituents as documents rather than plain HTML text, to use PDF files. This format allows the document to retain its original formatting regardless of the constituent's computer type or platform.

PDF is an open de facto standard for electronic document distribution worldwide. This universal file format preserves all the formatting, such as fonts, artwork, layout and links of the original source document, regardless of the program and computer system used to create it. PDF files are compact and can be shared, viewed, navigated, and printed exactly as intended by anyone with free software.

Acrobat Reader

To read a PDF file, a copy of Adobe's **Acrobat Reader** must be installed on the computer. If Acrobat Reader is not already installed, a free copy can be downloaded from Adobe's Web site.

If PDF files are to be offered, a link should be provided that will take constituents to the Adobe Acrobat products page on Adobe's official Web site or to an authorized Adobe Acrobat Reader software download page. Adobe has specific linking, trademark and logo usage requirements that must be respected by agencies. In accordance with those requirements, agencies may either provide a graphical or textual link to Adobe's Web site as follows:

OR   <u>"Get Acrobat Reader"</u>

Linking to Pages or Files on georgia.gov from within PDF Documents

Problem:

Agency Content Contributors may place links within their documents to existing pages or files within **georgia.gov**. However, the CMS-generated links no longer work once the PDF document is saved locally and viewed outside the Web browser.

Why this is a problem:

When a document is converted to PDF, Adobe Acrobat can be used to automatically activate existing links, or manually add them. Certain CMS-generated links contain commas (also referred to as curls), which render the links invalid when a PDF is viewed outside of the Web browser. In other words, if a PDF document is saved locally and a user opens it using Acrobat, links to CMS pages will be broken. This is not a problem when linking to files (PDF, DOC, etc.) – it is only a problem when linking to content pages. The cause has to do with how Windows handles links passed from one application to another.

Solution:

Agency Content Administrators or content contributors who are using content in a PDF that hyperlink to **georgia.gov** must include the following disclaimer on their Web page.

Disclaimer: Saving this document locally and/or viewing it offline could cause problems linking to other documents and/or having outdated information.

Agencies can direct all document creators to use one of the techniques shown below to describe how to locate particular pages or files within **georgia.gov**:

Instead of…
Writing within a document –   "See <u>http://gta.georgia.gov/02/channel/0,2188,1070969_1404087,00.html</u>"
Try…
Embedding this URL as a hypertext link –   <u>GTA Enterprise Policies and Standards Page</u>   - or - Writing within a document – "Go to the GTA Web site: <u>gta.georgia.gov</u> **> Technology Initiatives > Enterprise Policies and Standards**"

Handling Large PDF Files

Some constituents' browsers or computers may have trouble with large PDFs. Therefore, it will be helpful to include instructions that inform constituents how to download and save files to their local drives. The following example text may be used or modified by the agency:

"If you have problems opening a file in Windows, you can right-click on the link to the file and select "Save Target As…" This will save the file to your hard drive. You can then open it from there. On a Mac, holding down the mouse button on the link brings up a menu that allows you to save the file to your hard drive."

Agencies should also be mindful of the download times necessary for large PDF files. For instance, a 300K file takes approximately one minute to download on a 56K modem.

Writing a Description for your PDF

The following example illustrates how content contributors can provide information about the file type and size and also provide a link to Get Adobe Reader. Providing a description of the link is optional if you feel the title isn't descriptive enough.

Some documents on this page may be provided in Portable Document Format (PDF). In order to view these documents, you must Get Acrobat Reader, available for free on Adobe's official Web site.

Link name without description of content

Joining georgia.gov Guide

(PDF document, 92 pages, 1.32 MB)

Link name with description of content

Joining georgia.gov Guide

Comprehensive document which includes the Table of Contents, all Chapters, and all Appendices. (PDF document, 92 pages, 1.32 MB)

Accessibility Issues/Online Conversion Tools for Adobe PDF Documents

Agencies can also provide text that directs the user to use Adobe's online conversion tools for PDF files. These tools may be helpful for constituents who either cannot use Adobe Acrobat Reader or are visually impaired and whose screen reader software is not compatible with Adobe Acrobat Reader. The online tools convert PDF documents into either HTML or ASCII text, which then can be read by a number of common screen reader programs. More information about these tools can be found at http://www.adobe.com.

NOTE: Like most conversions to HTML, use of these online conversion tools will likely result in the loss of all formatting and related file attributes.

Streamlining the Load

Bandwidth conservation is important in making agency Web sites usable by as many constituents as possible. Slow-loading Web sites can discourage constituents from staying or returning to the agency's sub-portal. Therefore, agencies should try and limit the size of each page, both to improve the Web site and to keep from overtaxing the entire network.

Many constituents will connect to agency sites by modems, which are too slow to allow quick loading of most pages. Some constituents pay for their time online and possibly for each phone call. So, the more downloading a constituent has to do at an agency site, the less likely the constituent will return to access its content and services in the future.

Several tips for minimizing constituents' download time include:

- Do not overestimate available bandwidth. (Bandwidth is still a limited resource.)
- Aim to keep the total size of the file—text and graphics—to no more than 60K.
- Avoid graphically intensive pages. Important information may go unnoticed by constituents if the page has too many images.
- Use only one large image on each page. If the need arises for several images to be made available in the same location, such as a photo gallery, shrink the graphics to thumbnail size and link them to a full-sized version.
- Use graphics reduction techniques:
    - Keep images small. Use JPEGs instead of GIFs. Reduce GIF palettes.
    - Reduce the colors used in GIFs.
    - Avoid animated GIFs. If they are necessary, use the proper tools to create them and keep the sizes small. Animated GIFs take up processing time in the constituent's machines, and some are likely to stop them.
    - Substitute text for graphics where appropriate. Do not depend on images. Some constituents view Web pages with graphics turned off. Some use text-mode browsers, VGA 16 color graphics, etc.
    - Re-use images. For some browsers, images only get loaded once, regardless of how often they appear on a Web site.
    - Provide the HEIGHT and WIDTH attributes for images. These attributes will allow browsers to leave room for graphics while presenting the text first.
    - Avoid using sound. Sound files are large and consume valuable agency content space.

Requesting Web Site Statistics and Reports

Currently, GTA does not provide Web site statistics to agencies joining **georgia.gov**.

In the future, however, agencies will be able to view reports regarding the number of constituents that access their sub-portals and their purpose for doing so. These reports may provide detailed statistics such as:

- Total number of HTML requests (including bad requests)
- Distinct files served
- Bytes transferred associated with agency content
- Ranking of Web content according to number of times accessed
- Peak and off-peak usage indicators

Search Engines

Third-Party Search Engines

Search engines are third-party systems that classify Web content in a multitude of ways. Many agencies want to be listed by the major search engines and to be high on the list of pages returned by a given search.

GTA is responsible for regularly submitting **georgia.gov** Web pages, including agency sub-portals, to the major Web search engines. By using the CMS, agencies will ensure that the placement of their Web pages on major search engines will be improved constantly.

georgia.gov Search Engine

GTA has established certain parameters for searching content on **georgia.gov**. For example, the **georgia.gov** search engine is currently set up to only search the **georgia.gov** addresses. These parameters will affect how the search engine functions and increase the importance of proper content tagging. When using an advanced search engine like **georgia.gov**'s, remember these important considerations:

- The quality of the search results is dependent on the agency properly tagging the content in the Content Management tool.
- The search engine quality will increase over time. It is necessary to regularly monitor what constituents search for and adjust search engine parameters accordingly.
- GTA may make periodic recommendations to agencies regarding the organization of their content if search results are not as expected.
- Advanced personalization, when launched, will rely on the search engine behind the scenes to deliver targeted content.

Graphics and Multimedia

Advanced Graphics

georgia.gov does not mandate standard graphics development software. However, agencies should use standard digital file formats, such as JPEG and GIF. Web page graphics should appear consistently on many different browsers. To reduce download times, the size of graphic files should be as small as possible without sacrificing quality or effectiveness. For details on suggested digital file formats, see section 5.8.2 JPEG vs. GIF.

Agencies are not required to obtain approval from GTA to publish specific content of graphics and photographs. However, such content must adhere to the standards and guidelines in this Guide.

NOTE: There may be legal restrictions for how and when photographs, drawings, or video and sound clips of individuals are published on the Web. These restrictions are designed to protect people from having their images used without permission and to protect photographers from liability for potential legal action. With a signed release, a photograph may be published on an agency's sub-portal based on the terms of the document. That is, a "model release" or "model clearance" is needed to specify the terms under which photographs may be used. This document may be a brief (one paragraph) statement, signed by the person being photographed, granting permission to take the photograph, describing the extent of the photograph's use, and stipulating the compensation for the photograph.

Agencies are responsible for obtaining proper permission prior to publishing photographs of individuals or groups of individuals. For more information, they should contact their legal counsel.

JPEG vs. GIF

Digital imaging technology standards are constantly changing. JPEG and GIF image formats are the current industry standard for compression-based graphic file formats. Each format takes an uncompressed image, such as a bitmap, and compresses it to a smaller file size. Most browsers support JPEG and GIF. These file formats are supplied and discussed in further detail in the Sub-Portal Training Manual.

See the Sub-Portal Training Manual

JPEG or GIF?

Choosing the format depends on the type of image, how small the image needs to be (file size), and the way the graphic is to be downloaded.

Type of image

Photographs and graphics with numerous color fields, particularly colors that blend and fade into each other, are best served by JPEG. On the other hand, if the image has flat color fields, it will compress well in the GIF format. The JPEG format enables the creation of images with millions of colors, whereas GIF is restricted to 256 colors.

File size

JPEG permits a greater degree of compression than GIF, enabling quicker download times for larger graphics. JPEGs appear to retain almost complete image quality for most photographs. The GIF format may produce a distorted image resulting from the adjustment of pixels within a graphic to simulate the display of colors not in the GIF's color palette. However, the JPEG format does not work well for graphics that contain large fields of color. These color fields can break up and fragment.

Downloading

An image's compression format shapes the way a browser downloads it. Browsers can perform several actions with GIFs that are not supported with JPEGs:

- A GIF can be interlaced. Interlaced GIFs appear first with poor resolution and then improve in resolution until the entire image has arrived. This capability allows the viewer to get a quick idea of what the picture will look like while waiting for the rest. JPEGs can only arrive linearly, from the top row to the bottom row.
- The background of a GIF can be made transparent, so that the background color of the browser window can be seen.
- GIFs can be animated; JPEGs cannot be animated.

Alt Tags

Effective alternative (ALT) text for inline images is a key element in creating a usable, highly accessible Web site. The ALT text provides substitute text, primarily for use when the image is not being displayed or cannot be viewed by a constituent. A common mistake (apart from not using ALT tags at all) is to provide only a description of an image, without considering the purpose of the image on the page (e.g., to perform an action or to navigate).

Effective guidelines for ALT tags include:

- Use them for all actions, including navigation.
- Keep them short. Many browsers treat ALT text as one long line with no word-wrapping or line breaks. In many browsers, lengthy ALT text can ruin page formatting for viewers browsing non-graphically.
- Keep them descriptive and meaningful.
- Discard decorations that convey no content. An empty ALT tag (ALT="") will effectively discard them.

Within the CMS, the ALT tag is entered into the "File description" text box. Consult the Sub-Portal Training Manual for more information about ALT tags.

Height and Width

Agencies should include height and width attributes whenever using graphics or images. These attributes will allow browsers to start rendering the picture immediately, giving the perception of a quicker download. For ways of actually decreasing the download time, see section 5.5 Streamlining the Load.

Fewer Colors in GIF Files

Agencies that save graphic files as "indexed color" should experiment by reducing the number of colors. Such a reduction results in smaller files:

8 bits = 256 colors
7 bits = 128 colors
6 bits = 64 colors
5 bits = 32 colors
4 bits = 16 colors
3 bits = 9 colors
2 bits = 4 colors

Dots Per Inch (dpi)

As a general rule, only images that enhance or support the agency's content should be used. The file size of all imagery (including photos, illustrations, and icons) should be kept as small as possible.

The following guidelines have been established for **georgia.gov**:

- Always set images to 72 dpi.
- Keep individual graphics under 30K. As a rule, maps, diagrams, and large photos should be converted to a PDF and made available for download separately.
- Avoid unnecessary images.

Flash

Flash is a plug-in and Web development application from Macromedia. Files created in Flash combine animation, sound and interaction and take advantage of a vector-based format to minimize size. Flash (**.swf**) graphics files can be created in Macromedia's own Flash program or in other competing software applications. Many Web browsers still require a plug-in to be installed before they can play Flash animations.

Flash can enhance a constituent's experience. For example, it can be used for:

- Rich User Interfaces
- E-learning Courses
- Presentations
- Application Front-Ends

- Streaming Media

However, Flash may cause conflicts with accessibility guidelines, especially if it is used for navigational purposes. Use it sparingly to avoid compatibility problems or issues.

Streaming Media

Streaming media is audio or video that is sent and viewed in real time from a streaming media provider to a constituent's machine. Unlike audio or video files that are downloaded as large units, media is sent in a continuous "stream" and played as it arrives. The constituent watches or listens via a media player, an application often set up as a browser plug-in.

A plug-in, such as RealPlayer, Windows Media Player or QuickTime, decompresses and plays the data as it is transferred to the computer over the Internet. Streaming audio or video avoids the delay in downloading an entire file and then playing it with a secondary application.

Agencies are not mandated to use any specific streaming media providers/hosts for audio or video when joining **georgia.gov**. Georgia Public Broadcasting provides "Internet Streaming Services and Digital Media Asset Management Services for State of Georgia Government Organizations effective March 2, 2002."

For information about current services, contact:

> Georgia Public Broadcasting, IT Division
> 260 14th Street, NW
> Atlanta, Georgia 30318
> 404.685.2566
> E-mail: streaming@gpb.org

Regardless of the provider and, as with any other link or file on **georgia.gov**, all content will be reviewed regularly and may be removed for any of the following reasons:

- The provider no longer hosts the streaming media being linked to.
- The information being presented is inaccurate, misleading or otherwise violates the criteria and requirements set forth in this Guide.
- Access to the media has become difficult.
- The media is permanently unreachable or remains unavailable for a long time (especially when GTA is unable to contact the streaming media provider).

In the future, streaming media services may be provided by **georgia.gov**. Such media will remain accessible to agencies that have joined **georgia.gov** for as long as needed, if ownership and necessity are ongoing. At periodic intervals, GTA will reassess all media by verifying ownership and continuing need.

Agencies that plan to produce and encode their own videos should encode them for streaming across the maximum possible number of bandwidth options. For best performance, media producers should encode and deliver files in **.rm** or **.ra** formats. While other formats such as **.avi**, **.mpg**, **.mpeg**, **.mov**, and **.qt**, are possible, image quality may suffer. At this time, GTA does not provide any agency support for streaming video production and encoding.

Section 6 - Content Management and Application Delivery

Overview

This Chapter provides additional in-depth information about two key components of the **georgia.gov** portal infrastructure – Content Management and Application Delivery. **georgia.gov** provides robust, reliable environments for both of these components that are designed to provide consistent methods for agencies to develop and deploy services and information to constituents. Readers who are looking for information in regards to the processes for deploying content and applications within **georgia.gov** should refer to Chapter 4 of this guide.

Content Management

georgia.gov Content Management System

The **georgia.gov** Content Management System is an integrated collection of applications designed to help minimize time coding, provide consistency of look and feel by using standardized templates, and update or create content in real time. The entire content lifecycle, from collection and production to delivery and analysis, can happen within an Internet browser window.

Above all, the Content Management System provides an intuitively easy way for agencies to contribute content. It ensures that agencies adhere to all **georgia.gov** standards and that navigational and security elements remain intact. The Content Management System enforces consistency of site standards, look and feel, branding, font types, and style types.

Using the georgia.gov Content Management System

All **georgia.gov** content will be published using the CMS application and templates to ensure a consistent look and feel across all agency sub-portals. The Sub-Portal Training Manual contains detailed instructions for how to use the Content Management System and how to publish content using the standard templates within the CMS Web-based application.

See the Sub-Portal Training Manual

Content Management Environment

Environments

The two environments within the CMS are Working and Production. Content entered into the Content Management Web interface is stored in a working area on the production environment. The Working area is not visible to constituents (not "live") and allows the content to be previewed by agency staff. Once the content has been approved in the proper workflow, it can be launched live on **georgia.gov** in real time. When a content item is launched ("goes live"), it is then moved to the Production area.

Roles

Roles map relationships between users and their level of authorization. In other words, roles determine which features a user can access and which functions they can perform. Currently, there are three roles available: Administrator, Channel Producer and Approver.

See the Sub-portal Training Manual for more information about environments and roles.

Application Delivery

Applications Development Guidelines

The guidelines specified and referenced in this section of the Guide will ensure that Web applications and services published on **georgia.gov** meet industry and enterprise application architecture best practices. For a more detailed technical description of these topics, consult the Portal Developers Kit.

Portal Application Logical Tier Structure

Application development and integration should conform to industry best practices, with separation of concerns as a guiding principle. The Portal architecture is constructed on five logical tiers:

- Client
- Presentation
- Business
- Integration
- Enterprise Resources

These tiers have been described extensively in Portal documentation, particularly in the Application Integration Guidelines document and the Abridged System Architecture document. Both are available from the PDK Web site. Additionally, the use of design patterns should be prominent within and across tiers and should follow industry best practices.

Application Integration Models

Following are the six integration models for applications in **georgia.gov**. The first four are the preferred methods of integration. GTA strongly recommends one of the integration models or the models in the Application Integration Guidelines document found on the PDK Web site. All application integration efforts must conform to industry best practices.

Integration Model 1: Native J2EE Application

In the Native J2EE model, applications run directly on the georgia.gov environment without any need for integration to other systems for functionality.

Integration Model 2: Web Service Application

In the Web Service model (example: .NET), application functionality is provided via a Web service interface. georgia.gov provides the user interface to the Web service.

Integration Model 3: Legacy Application

In the Legacy model (client/server, mainframe), applications can be extended via the WebMethods integration tier of the georgia.gov environment. This extension allows them to communicate via their native languages and to be accessed via other applications or the presentation tier.

Integration Model 4: Screen Scrape HTML

For a limited subset of applications, it will not be appropriate to use any of the preceding integration models. Instead, it may be more reasonable to scrape the content from those applications and place it onto georgia.gov. Applications that use this Screen Scrape HTML model must note it as an exception in the MOU and have prior approval from GTA.

Integration Model 5: Redirect to Non-georgia.gov Application

For a limited subset of applications that will reside outside the georgia.gov environment, it may be more appropriate to provide a link to them. Applications that use this Redirect to Non-georgia.gov model must note it as an exception in the MOU and have prior approval from GTA.

Integration Model 6: COTS Web Application

For a limited subset of applications, it may be necessary to integrate commercial off-the-shelf (COTS) applications. Applications that use this COTS Web model must note it as an exception in the MOU and have prior approval from GTA. (The agencies must lock down their code, if this model is to be used.)

NOTE: The **Remote Portlet** is not available or supported under the current infrastructure.

Programming Languages and Platforms

This section provides a high-level overview of programming languages and platforms used in georgia.gov. While the Joining georgia.gov Guide does not provide detailed instruction on programmatic coding, the Portal Developers Kit is emerging to provide in-depth information for developing applications for **georgia.gov,** including reference implementations of enterprise components.

Internet-based applications leverage a distributed, n-tier architecture in delivering services to constituents. (See section 6.2.1.1 Portal Application Logical Tier Structure for a description of the **georgia.gov** logical n-tier implementation.) This distributed nature allows the use of many programming languages and platforms throughout the tiers. Below are some of the languages and platforms with the corresponding tier in which they are commonly used. Those languages and platforms natively supported or recommended for use in georgia.gov that may not require use of the integration techniques described in section 6.2.1.2 Application Integration Models are shown in **bold**.

Client Tier:	• **HTML 3.2**, XHTML, DHTML • **JavaScript 1.3** • **CSS Level 1** • **XML 1.0/SOAP** • Others (VBScript, Applets, ActiveX, etc.)
Presentation Tier:	• **J2EE 1.2/1.3**, Microsoft.NET • **JSP 1.1**, ASP, CGI • **JAVA Servlet 2.2** • Others (Perl, PHP, C++, C#, etc.)
Business, Integration, & Enterprise Resources Tiers:	▪ **J2EE 1.2/1.3**, Microsoft.NET ▪ **EJB 1.1**, ADO ▪ **RMI/IIOP 1.0** ▪ **JMS 1.0** ▪ **JNDI 1.2** • XML 1.0/SOAP ▪ **SQL3, JDBC 1.0**, ODBC

Programming and Scripting Languages

The architecture of individual applications, business requirements, end-users, and common sense will ultimately drive language selection. Notwithstanding, there are some rules-of-thumb that should guide selection:

1. Use current stable industry standard language implementations. Where possible, avoid proprietary language extensions. While leveraging individual vendor's extensions can save time or increase functionality, be aware that such use may also introduce maintenance or upgrade costs later.

2. While giving preference to current stable industry standard language implementations, ensure service delivery degrades gracefully for older technologies. For example, client facing services leveraging DHTML should be tested and, if necessary, provide acceptable work-arounds for older browsers that support only HTML 3.2.

HTML 3.2, XHTML, DHTML

Hypertext Markup Language (HTML) is a structured language that uses embedded tags. Web browsers can identify and convert these tabs into Web pages. HTML has evolved since its development in 1994, incorporating as standard tags many that were developed previously for specific browsers.

HTML can be created via a graphical WYSIWYG editor, such as Macromedia's DreamWeaver, or an application conversion, such as an MS-Word file saved in HTML form (not recommended); or coded from scratch in a text editor. However, most HTML content provided directly to **georgia.gov** by an Agency content owner will be delivered and managed by the Content Management System and its respective Web-based editor, eWebEditPro.

Refer to the Sub-Portal Training Manual for more information on eWebEditPro.

XHTML is the next evolution of HTML using the structure and syntax rules of XML. Similarly, DHTML is a recent extension of HTML that allows dynamically generated HTML to be rendered on a client. Adoption of XHTML and DHTML across browsers is not universal, so care should be taken in identifying whether targeted end-users and their respective browser clients support these technologies prior to implementing an XHTML- or DHTML-based application.

Helpful links:

- W3C HyperText Markup Language (HTML) Home Page
- W3C Markup Validation Service

JavaScript 1.3

JavaScript is a platform independent scripting language that is used frequently in the browser for client-side scripting to improve usability. JavaScript is allowed in **georgia.gov** and specifically recommended for client-side data validation to reduce "round-tripping" and the resulting performance and latency investments. A few points to consider when leveraging JavaScript:

- Client-side data validation using JavaScript does not obviate the need for server-side validation, since client-side JavaScript can be circumvented or disabled. At the server, user-supplied data should always be validated, URL-encoded, etc.
- Since users of **georgia.gov** in general will be an Internet audience at-large, client-side JavaScript functionality must be thoroughly tested and compatible on the current and previous major releases of the primary Web browsers. Where

incompatibilities are found, work-arounds must be implemented. Older Web browsers, unless tested compatible, should be detected and redirected before accessing JavaScript-enabled pages to avoid unexpected user results.

- Known vulnerabilities, such as cross-site scripting (see CERT Coordination Center), may take advantage of applications using JavaScript. While the assessed threat is relatively low, care should be taken to prevent exposure to such risks.

Cascading Style Sheets (CSS) Level 2

CSS2 is a style sheet language that allows authors and users to attach style (e.g., fonts, spacing, and aural cues) for structured documents (e.g., HTML documents and XML applications). By separating the presentation style of documents from the content of documents, CSS2 simplifies Web authoring and site maintenance.

CSS2 builds on CSS1 and, with very few exceptions; all valid CSS1 style sheets are valid CSS2 style sheets. CSS2 supports media-specific style sheets so that authors may tailor the presentation of their documents to visual browsers, aural devices, printers, Braille devices, handheld devices, etc. This specification also supports content positioning, downloadable fonts, table layout, features for internationalization, automatic counters and numbering, and some properties related to user interface.

Using a single default style sheet such as the **georgia.gov** style sheet for the enterprise helps reinforce a consistent user experience. (see section 5.1 Content Design and Drafting Considerations for tips on optimizing usability.) In the future, expect additional enterprise style sheets to be developed to address accessibility and personalization needs. Although style sheet technology allows a hierarchy of overriding style sheets, agencies are encouraged to leverage the enterprise style sheets made available via **georgia.gov**, where possible, to ensure the portal's uniform look-and-feel. If an agency desires modifications to the existing style sheets, it should direct such requests to the Portal Contact Center (PCC) Tier 2 Manager (see section 10.8.2.3 Production Change Management (CM) Process).

Helpful Links:

- Cascading Style Sheets, level 2 Specification
- W3C CSS Validation Service

XML 1.0/SOAP

Extensible Markup Language (XML) is a simple, very flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere.

Using pure XML on the client tier currently requires a highly defined target audience with known support for XML and for that reason has limited value to **georgia.gov**'s constituents at large. However, XML can be combined with XSLT/CSS to provide robust services to varied clients with limited modification of business and presentation tier logic.

As the state's portal evolves, Web Services, Internet applications which leverage SOAP protocols, will increase in both value and use, particularly as a means of transferring data-rich information to be additionally processed by the client. SOAP or Simple Object Access Protocol is an XML-based method of wrapping and consuming these services.

Helpful Links:

- [ENT-01-001-STD XML Standards](#)
- [Extensible Markup Language (XML)](#)

Others (VBScript, Applets, ActiveX, etc.)

Many clients can be extended using numerous other technologies and languages which have limited support in **georgia.gov**. Careful consideration should be made before adopting such means of delivering services via **georgia.gov** to determine if other well-supported **georgia.gov** approaches could more effectively address the business need. Choosing proprietary approaches with limited industry acceptance runs counter to the state portal's intent to provide interoperable access to state services.

Programming in the Presentation, Business, Integration, and Enterprise Resources Tiers

Refer to the [Portal Developers Kit](#) for an in-depth discussion of the languages and technologies.

Architectural Standards of Development and Runtime Frameworks

The state has standardized on two platforms for Web-based application development: Sun J2EE – Java 2 Enterprise Edition and Microsoft.Net. See [ENT-01-002-STD Web-based Application Development Platforms](#) for additional information.

Additional information and tips on runtime frameworks, including reference implementations, can be found in the [Portal Developers Kit](#).

Application Deployment Guidelines

The following guidelines apply to all applications that are hosted on or interact with **georgia.gov**:

1. The Authoring (Developing) Agency develops its application or dynamic Web page in its own development environment (or uses GTA's if they don't have one) that includes:

    - The approved set of development tools per the PDK documentation
    - A Source Control System:
        - GTA's chosen Source Control tool is Rational Clear Case. Clear Case may be used as a standalone tool or may be integrated into the Rational Suite. This decision is made on a project-by-project basis.

- If an agency does not have its own development and source control tools, GaNet tools can be made available to them on a case-by-case basis.
- GTA is not forcing the use of Clear Case during development. However, the use of Clear Case is mandatory for deployment.
- A common point of network connectivity with the GaNet Quality Management group.

2. The Authoring Agency then Secure File Transfer Protocol (SFTPs) the application as a tar or tar/gz file which includes the files required for deployment and deployment instructions to the common connectivity point for the GaNet Configuration Management Team (CMT) to pick up (or checks it into the GaNet Clear Case tool, if available to them).

3. The CMT then SFTPs the tar files to the Portal Development Environment to conduct a test build and deployment in the Development environment. This step can be bypassed if the development has occurred in the Portal Development Environment. If the development has occurred in the Portal development Environment, the CMT will verify that the application builds and deploys correctly in the Development Environment.

4. Once the test build and deployment has successfully occurred in the development environment, the CMT checks the same file set out of Clear Case and deploys the application through the Portal Test Environment DMZ to the Portal Test Environment.

5. The CMT deploys the app on the app servers or the Web servers – depending on the type of app being deployed per the deployment instructions provided by the developer.

6. The CMT stops and starts the app or Web servers as necessary

7. The CMT then resets the Load Balancers to recognize these changes.

8. Testing begins by the QM Test Team.

9. Changes at this point will follow the defect tracking process, and the resultant changes to the code set will be checked into and out of Clear Case using that process.

10. Once a final code set is achieved, it is checked into Clear Case, baselined and checked out of Clear Case.

11. The final code set is then deployed to the Portal Production Environment per the deployment instructions provided by the developer, in the same manner as it was deployed into the Portal Test Environment.

See the Configuration Management Process Documents Library.

Promotion to GTA Portal Development and Test Environments

The process for promoting an application into the Portal Development and Test environments is outlined in the PDK documentation on the PDK Web site.

Test Conditions and Expected Results

This section outlines and defines the strategy and approach to testing on Web Applications, developed outside of GTA, that are to join **georgia.gov**. It includes the tests to be performed and the sources that contain the conditions to be tested. End-to-end testing will be conducted, with primary focus on the testing of critical and high-risk functions of an application with the Portal, via the Web user interface. This process will be referred to as Portal Acceptance Testing. The GTA GaNet Quality Management Test Unit will be responsible for conducting or insuring that the Portal Acceptance Tests are conducted.

The goals are to determine if the application:

- operates as planned on the Portal
- complies with the Portal look and feel
- works without damaging any other aspects of the Portal

Test Plan

For each application, a Test Plan will be prepared. Refer to the GaNet Test Plan for Portal Applications which is available from the Associated Documents list. This document explains the Portal Acceptance Test process and can be used as a template, to be adapted for each Web Application that is joining the Portal; elements may be added, changed or removed as necessary. Instructions throughout this document are boxed and in italics. The testing process outlined in this document is based on the Rational Unified Process (RUP) for software development and testing. Where possible, Rational software tools will be used. Severity criteria can be found in this document. The GTA GaNet Test Unit will work with the Agency owner and/or the GTA Project Manager of the application to be tested to prepare this document.

Test Checklist

For a summary of the Test Process, refer to the Test Checklist for Portal Acceptance Testing which is available from the Associated Documents list. The purpose of this Test Checklist is to ensure that all applications or static content placed on **georgia.gov** meets the necessary requirements and standards.

Quality Criteria for Migration to Production Environment

The following list of tasks and / or deliverables must be completed and available prior to migration of applications or content changes to the production Portal environment.

- For an application, agency test plan / scripts
- For content changes, agency content checklist
- Agency test certification
- GTA acceptance test certification
- GTA security review of application
- Contact Center scripts

- Run book, including application description, architecture information, recovery procedures, and installation CD / instructions
- Communication plan
- Escalation procedures, including caller information and the sequence and timing of calls
- GTA charge back plan
- GTA billing schedule
- Service Level Agreement (SLA), including expected response times, costs, penalties, services to be provided, monitoring information, service requirements management, methods for measuring metrics, roles / responsibilities, problem and change management, and what the agency can and can't do in the production environment
- Agency-provided official desired production deployment date to GTA

Promotion to GTA Portal Production Environment

1. Upon successful completion of testing in the GTA Portal test environment with no known level 1 or level 2 issues (based upon the attached definitions) and agreement to deploy, the application will be deployed to the georgia.gov 'staging' environment from the GTA configuration management repository using the agency's deployment instructions.

2. Once the application has been deployed in the georgia.gov production environment, the agency will make a test transaction in the georgia.gov production environment in order to insure a successful deployment.

3. If an application error occurs in the georgia.gov production environment, the application will be returned to the development environment from which it came for problem determination and rework.

Severity Level	Type	Description
1	Critical	Program halt or loss of data
2	High	Loss of important functionality, no workaround
3	Medium	Loss of important functionality, workaround available
4	Low	Cosmetic or other non-functional defect

GTA Portal Production Environment

Management of the GTA Data Center production computing environment is centered on the goals of Reliability, Availability and Serviceability (RAS). These goals are far more complex in the open systems world where there are many manufacturers and standards bodies, and the scale of the distributed environments which GTA must manage can be very large. Such flexibility requires careful management. GTA has devised a model for the flexible, disciplined management of the **georgia.gov** environment.

To operate a modern, capable, efficient and robust Enterprise Computing Environment with the capability and the capacity to systematically manage and reduce the State of Georgia's costs of application infrastructure downtime caused by unplanned outages and to achieve RAS, GTA must seek to maximize predictability. The quest for predictability is sought on three fronts - Standards, Processes and Technology.

- Using standards, GTA will improve the architecture, reduce downtime, and keep hosts, subsystems and software versions in sync.
- Using Processes, GTA helps ensure that system maintenance activities follow known paths, which include quality assurance steps such as peer review, impact analysis and deployment planning.
- Using Technology, GTA employs automated functions and tools to reduce the management effort needed to support **georgia.gov**.

Production Acceptance (PA) Process

The Production Acceptance process is intended to guide agencies and support staff through controlled change with respect to the introduction of a new application into the **georgia.gov** Production environment.

The PA process provides a framework for introducing change into the production environment in a manner which is controlled, predictable and auditable. This process seeks to ensure maximum availability of systems and maximum constituent satisfaction with a minimum amount of ongoing intervention by support staff. This involves Data Center personnel learning what it means to manage and support the new application, and then introducing it into production in a controlled manner.

Section 7 - Enterprise Components

Inventory of Enterprise Components

The **georgia.gov** application environment is a service-oriented architecture (SOA). A service is a piece of functionality from an application or component. For example, the driver's license renewal application utilizes a function to register voters. This function could be packaged as a service and be made available to other applications. Web Services is used to make services available and to provide interoperability between the disparate applications.

Enterprise components (also referred to as common services) within **georgia.gov** are those services that are centrally managed because of the common need for them across many different applications. Common application services include logging, authentication and authorization as well as business services such as credit card processing.

Additional enterprise components will be made available as they are completed. Documentation for using these services in applications is beyond the scope of this Guide. Technical documentation (i.e., that required by developers) for each component or service will be published in the PDK. The following sections provide a brief synopsis of the forthcoming enterprise common services. Implementation of these services should be completed by the end of the 2003 calendar year.

Authentication

Authentication is the process of validating a claim of identity. A user may be validated as authentic through a set of credentials, such as a user ID and password, a Smart Card or even biometric measurement (e.g. fingerprint scan).

Authorization

Authorization is the process of providing constituents' access to resources based on privileges assigned to them. A user may be authorized to access resources based on privileges assigned specifically to individuals or to roles (e.g., user, manager, or administrator).

Document Exchange Framework

The Document Exchange Framework (DEF) is designed to enable the secure transfer of documents programmatically, both internally and across the boundary of State Government. The Document Exchange Component is actually a general, messaging-based solution. Document Exchange Framework relies on the EBXML protocol and Web Services and constitutes an important tool for the interoperability and integration of disparate systems.

A reference implementation and examples can be found in the PDK Document.

Presentation Framework

"Struts" is currently the recommended presentation framework. It is a leading open source framework for developing Enterprise Java applications on the J2EE platform. Struts was originally developed as part of the Apache Jakarta project. A technical discussion of Presentation Framework can be found in the Application Integration Guidelines. Additionally, there are references in the PDK document to other work in this area.

Another important resource is the Portal Standard Tag Library (PSTL) available on the PDK Web site. PSTL encapsulates, as simple tags, core presentation functionality common to many JSP applications. Although the initial software has been developed, the technical user documentation is not complete. The documentation for this component will be available on the PDK Web site.

Help Framework

The Help Framework will be incorporated into the PSTL components. Documentation for this service will be made available through the PDK Web site when it is completed.

Logging Framework

A common framework for logging is available as a Portal service. The logging framework allows different agency applications to log messages to a centralized resource from which reports could be generated for different applications. The Logging Framework is built on the foundation of log4j from the Apache Jakarta project. The core log4j code has been extended to meet the logging requirements of EPIA.

The technical documentation for the logging service is available on the PDK Web site.

Payment Engine

The Payment Process Controller Component insulates applications in **georgia.gov** from changes in payment processing services (e.g., engine or gateway); provides applications and application developers with a standard, reliable and stable payment processing API; increases the manageability of payment processing for e-commerce applications; and improves the overall quality of service for payment processing applications.

The Payment Process Controller Component does not replace the functionality in any of the payment engines. Rather, it is limited to providing a thin layer of functionality (with multiple interfaces) to be situated between applications and other payment processing components. The interface on the application side will provide a stable API to applications and application developers. Multiple application-side interfaces will be developed so that applications can communicate with the Adaptor Component using an API, XML-based Web services, ebXML, etc., to ensure maximum flexibility.

More information on the Payment Process Controller can be found on the PDK Web site.

Portal Standard Tag Library

The PSTL (Portal Standard Tag Library) allows agency applications to link to, and extract content and visual elements from the CMS. Appropriate references should be made to follow Application guidelines when modifying these templates or the PSTL can be used to create an agency-specific look and feel.

The PSTL software is available on the PDK website.

How to Invoke Enterprise Components

The technical details for invocation of enterprise components are beyond the scope of the Guide. Technical documentation will be available on the PDK Web site as services become available in production.

How to Identify and Add Enterprise Components

Agencies who believe they have identified a need for an Enterprise Component should:

- Consult the current inventory of built, in-process and planned enterprise components.
- Provide their suggestion the GTA Liaison or GTA **georgia.gov** Project team.

Section 8 - Portal Support and Data Center Services

Overview

Agencies that deliver content or applications through **georgia.gov** must participate in the Distributed Portal Support model. A critical component of this model is use of the **georgia.gov** Portal Contact Center for Tier 1 support of all content and applications available through the portal. Adherence to this support model is key to ensuring that constituents experience **georgia.gov**'s "no wrong door policy".

In addition to the Distributed Portal Support Model, **georgia.gov** content and applications will be monitored and supported by the GTA-managed State Data Center. This allows agencies to receive the full benefit and reliability of a professionally managed 24/7 operating environment.

Distributed Portal Support

Distributed Portal Support is the set of processes and activities required to resolve contacts from constituents regarding GTA/agency content and applications. A "contact" is any event where a constituent sends an e-mail or calls a phone number found on **georgia.gov**. (Also, agencies may add an e-mail address/phone number to their sub-portal when maintaining it through the Web-based CMS application.)

Responsibility for resolving constituent contacts is shared between the GTA and the agencies. The **georgia.gov** Contact Center expects and is equipped to receive a majority of these initial contacts. One of its primary goals is to maximize the number of contacts they resolve quickly while minimizing the number of times an agency must be contacted.

To fully realize the benefits of Distributed Portal Support, agencies must:

- Provide Call Scripts and Frequently Asked Questions (FAQs) to the Portal Contact Center prior to publishing any content or applications to their sub-portal.
- Establish their own Agency Contact Center to handle constituent contacts that cannot be resolved by the Portal Contact Center. The size and scope of the Agency Contact Center is directly related to the quality and completeness of the Call Scripts and FAQs provided to the Portal Contact Center.
- Utilize the Problem Management Application as the tool for logging, tracking and transmitting Tier 2 support issues.

A detailed description of the Distributed Portal Support Model, the Agency Contact Center, and how the **georgia.gov** Contact Center and the Agency Contact Center communicate can be found in Appendix H: Distributed Portal Support Model.

Sample Call Scripts and FAQs can be found in Appendix G: Portal Contact Center Call Script Template and Appendix F: Portal Contact Center FAQs Template, respectively.

Data Center

Scope of Data Center and Services

The Data Center consists of the hardware, operating systems (OS), software, middleware and communications under the direct operational responsibility of the Data Center. The operational delivery of Service Level Objectives is assured by the Data Center Shared Services and Monitoring Center Teams.

Every major agency contains varying amounts of information resources: applications, data, and computer systems. And every major agency includes ever-changing users of these resources: employees, contractors, clients, suppliers, and others. The challenge is to make sure that all of these users have access to all of the resources they need, when they need them, in a secure manner, and at a reasonable cost.

As a technology integration authority, GTA helps agencies meet this challenge by achieving five objectives:

- Proactive Constituent Support
- Fault Tolerance Systems
- Robust and Secure Environments
- Project-Managed Services
- Controlled Change

Ongoing Technical Support

The Data Center Monitoring Center is the "command center" for the Enterprise Computing Environment. The goal of the Monitoring Center staff is to push information proactively on the Monitoring Center Web site or through Agency Contact Centers. In the event that the information needed is not available, an agency may call the Monitoring Center for status and updates. Be sure to check the Web site and the agency's internal contact center first.

All applications are monitored 24 hours a day, 7 days a week. The Monitoring Center is available from 6:00 am to 7:00 pm Monday thru Friday. "After-hours" availability is provided for critical problem resolution and recovery. The Monitoring Center may also be reached by sending an e-mail to the Duty Manager at IRM MC Duty Mgr@gta.ga.gov.

The Monitoring Center staff is responsible for Production Monitoring and responds to problems via the Data Center's Problem Escalation Process. They handle agency incident reports and service requests. They work closely with system engineers and database managers to resolve complex infrastructure-related problems.

Section 9 - Agency Cost Considerations

Overview

This Chapter describes how GTA will price **georgia.gov** services and how agencies will be billed for the services they utilize.

The **georgia.gov** Portal was designed and built to offer a rich array of features in support of open-standard interoperable Web based applications, a robust platform for managing Web based content, and shareable application components for greater efficiencies in application development and support. Joining **georgia.gov** gives an agency access to all of these services while the agency is only charged for the services it utilizes. Each month, the agency will receive a predictable, easy-to-understand bill with pricing that was forecasted prior to the current fiscal period.

Pricing and Billing for georgia.gov Services

Portal Services

The proposed charge back methodology for Portal services is based on an auditable cost model built using generally accepted activity-based costing (ABC) principles and on GTA's capability to forecast utilization of these services. The methodology is intended to be consistent with Georgia state government's planning and budgeting cycle and with all applicable federal regulations and guidelines. The methodology is built on the following guiding principles:

- **Cost Recovery**: By assessing agency clients for their fair share of the cost of Portal services, GTA only intends to recover the fully absorbed cost of providing those services, i.e., inclusive of all applicable indirect costs. The cost of other services will be recovered through similar mechanisms, but no subsidy of those services will result from the charge back for Portal services.

- **Proportionality**: An agency's charge back for the Portal services it utilizes will be proportional to its usage of those services.
- **Predictability**: Charge back for Portal services will be prospective; i.e., based on projected utilization of services. This will enable GTA to submit predictable billing for these services that is consistent from billing period to billing period within a fiscal year.
- **Flexibility**: The methodology is consistent with the design and objectives behind **georgia.gov** – clients will customize the design of their Portal-based applications by leveraging only those features of the Portal they opt to utilize, and only pay for their usage of those features. Likewise, clients that tap into a specific application component will only pay for their usage of that component.

The application components and the features of **georgia.gov** are referred to as the Portal services service line. This service line is made up of:

Portal Application Management Platform (Portal AMP)

This platform includes all features of the **georgia.gov** Portal related to operating Web-based applications. Depending on its design, a portal based application will utilize the different features, or service items, of the Portal AMP to varying degrees. The **georgia.gov** Portal is purposely designed to provide this flexibility to its clients when they are designing and building Web-based applications. Features of the Portal AMP include:

- Identity and access management services (e.g., authentication and single sign on)
- Directory services
- Integration services that enable a Web-based application to tap into the functionality and data of "legacy" applications
- Application management services (application logic management, transaction management and transaction data management)

Portal Content Management Platform (Portal CMP)

georgia.gov is also designed to provide its clients with the flexibility and autonomy to manage Web-based content in a secure environment. This environment, the Portal CMP, operates in concert with the Portal AMP to provide users of Portal-based applications with a superior, customized experience and improved access and delivery of client services. The Portal CMP is made up of a content builder/editor and a content repository.

Enterprise Application Components

GTA will build or acquire and then operate the Enterprise Application components. The components will be based predominantly on the Web Services application design and architecture paradigm, such that multiple Web-based applications can leverage their functionality.

These services and, where applicable the associated service items, are illustrated in Figure 9-1.

Enterprise Portal - Production

Application 1	**Application 2**	**Application 3**	**Application 4**	

Enterprise Component 1	Enterprise Component 2	Enterprise Component 3	Enterprise Component 4

Credit card payment processing

Utilize **some** functionality provided by the Portal AMP.

Utilized by Portal-based **and** other applications.

Portal Content Management Platform (Portal CMP)

Content Editor	Content Repository

Identity and Access Management Services   Portal Application Management Platform (Portal AMP)   **Directory Services**

Integration Services

Application Management Services

Application Logic Management

Transaction Management

Data Management

Operating Hardware and Software

Enterprise Portal - Development/Testing

Scaled down version of Production

Figure 9-1: **georgia.gov** Costing and Cost Recovery Model

Costing of Portal Services

The costing of specific Portal services is derived as follows:

- **Direct cost (attribution)**: for manpower (GTA employees or contract labor) dedicated to supporting the service, inclusive of salaries and benefits; equipment*, facilities and software* directly tied to an individual manpower resource; and other operating expenses.

- **Direct cost (attribution)**: for external service providers (e.g., a software maintenance contract), equipment*, facilities, software* and other operating expenses tied to supporting the service.

- **Semi direct cost (association)**: for manpower, external service providers, equipment*, facilities, software* and other operating expenses shared by multiple products or services. Examples of this type of resource and cost are: the **georgia.gov**'s operating hardware and software (Figure 9-1), the manpower of a work unit dedicated to supporting it, and the administrative and management staff of that work unit. A percentage of the cost of each of these resources would be associated with a particular service based on a generally accepted cost association basis. The standard basis used in the cost model is the percentage of direct cost of a particular service relative to the direct cost of all Portal services that utilize the shared resource.

- **Indirect cost (allocation)**: the cost model captures information about the cost of GTA indirect support functions such as human resources, procurement, accounting and billing. These costs are first allocated to all of GTA's service lines, including Portal services, using a generally accepted allocation basis. The

standard basis used in the cost model is the percentage of direct and semi direct cost of a particular service line relative to the direct and semi direct cost of all GTA service lines. The indirect cost allocated to the **georgia.gov** Portal services service line is further allocated to individual services within a service line. The standard basis for this step is the percentage of direct and semi direct cost of a particular Portal service relative to the direct and semi direct cost of all services within the Portal services service line.

* **NOTE**: The cost of equipment and software factored into the cost model incorporates refresh/upgrades expected over the useful life of these resources.

The Costing of Portal Services process is illustrated in Figure 9-2.
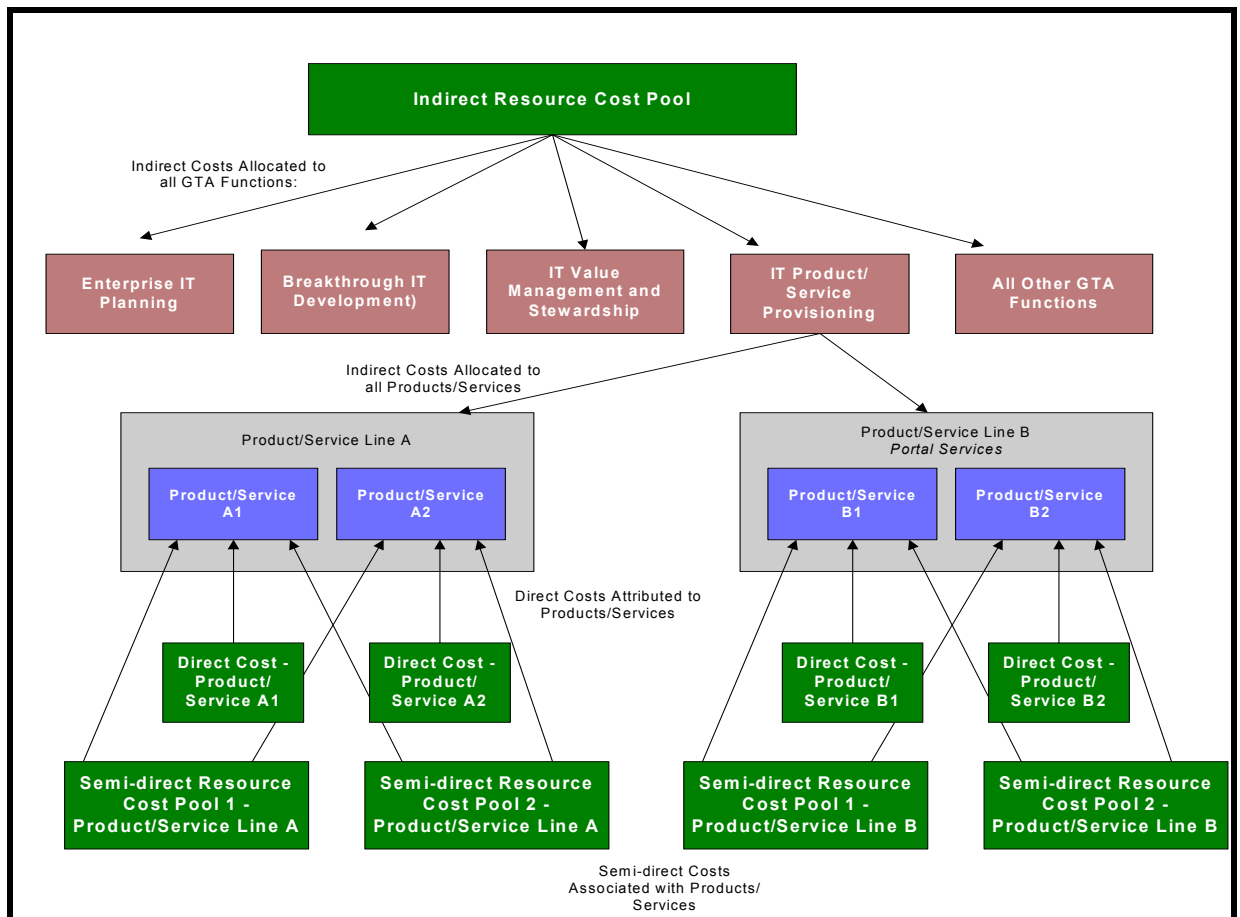
Figure 9-2: Costing process for all GTA services including **georgia.gov** services

Pricing of Portal Services

Pricing of Portal services to Georgia state government clients (charge back) will be derived as follows:

- **Forecast**:   During the state's standard planning and budgeting cycle, GTA and its agency clients will jointly forecast the impact of the clients' portfolios of Web-based applications on the various Portal services, including application components, for the upcoming fiscal year.
- **Charge Back Computation**:   Based on the forecast and on the continuously updated cost model, GTA will compute charge back amounts for the various Portal services by client:

Portal AMP: Because portal-based applications can leverage the various features of the Portal AMP to differing degrees, the following approach is used to price out a client's utilization of this service:

- - Each feature or service item of the Portal AMP is assigned a weight that corresponds to the resources required to support the particular service item relative to all Portal AMP service items (the resource requirements are derived from the cost model).
- - Each application will be rated based on its utilization of these service items. The rating will be based on an algorithm being developed jointly by GTA and several agency clients.
- - Each application's rating will be compared to the rating of all other applications in the forecast.
- - An application's cost spread ratio (CSR) is then computed by dividing an application's rating by the total of the ratings of all applications in the forecast. The CSR is the percent of the cost of Portal AMP that is assessed to the particular application.

Portal CMP: Pricing for the Portal CMP is based on the average amount of content that each agency client is expected to maintain in the Content Repository during the forecast period. An agency's content cost spread ratio (CSR) is then computed by dividing a client's forecasted content by the forecasted amount for all agencies. The CSR is the percent of the cost of Portal CMP that is assessed to the particular client.

Application Components: Because agency clients will leverage the various components to differing degrees, the following approach is used to price out a client's utilization of this service:

- - Each application component is assigned a weight that corresponds to the resources required to support the particular component relative to all components (The resource requirements are derived from the cost model.)
- - Each client's forecasted utilization of a component (based on projected transactions that utilize the component) will be compared to the forecasted utilization of all other clients expected to use the component.
- A client's component cost spread ratio (CSR) is then computed by dividing its forecasted utilization of the component by the total utilization of the component in the forecast. The CSR is the percent of the cost of the component that is assessed to the particular client.

Billing of Portal Services

Agency will be billed monthly for Portal services (and all other GTA services they receive). Monthly Portal service billings will be for 1/12th of the forecasted annual cost tied to the agency's utilization of these services.

Figure 9-3 shows how this methodology would be applied to assess clients for **georgia.gov** Portal AMP costs. The example assumes capacity, resources and corresponding cost sufficient to support two Portal based applications owned by two different clients.

NOTE: All weightings, ratings, and costs are for illustration purposes only.

Portal Application Management Platform (Portal AMP)	Total Annual Cost to be Charged Back to Agency: $100,000		
Agency # 1	Percentage of Costs: 74.4%	Monthly Price: $6,200 Annual Price: $74,400	
Feature/Service Item	**A Resource Intensity Weight**	**B Application # 1 Rating (0=lowest, 5=highest)**	**C = A*B Application #1 Weighting**
Application Management Services	0.5	4.0	2.0
Identity, Access and Directory Management Services	0.25	3.0	0.75
Integration Services	0.25	0.5	0.125
Total Application Rating			2.875 (2.9)
Application Cost Spread Ratio (CSR)			*74.4%*

Agency # 2	Percentage of Costs: 25.6%	Monthly Price: $2,133 Annual Price: $25,600	
Feature/Service Item	**A Resource Intensity Weight**	**B Application # 1 Rating (0=lowest, 5=highest)**	**C=A*B Application #1 Weighting**
Application Management Services	0.5	1.0	0.5
Identity, Access and Directory Management Services	0.25	1.0	0.25

Integration Services	0.25	1.0	0.25
Total Application Rating			1.0
Application Cost Spread Ratio (CSR)			*25.6%*

Figure 9-3: Sample spread of Portal Application Management Platform (Portal AMP) costs

Initial Pricing of Portal Services

This methodology also addresses pricing for the initial client base of Portal services. The initial clients will not be charged back based on the full cost of all the capacity available in the Enterprise Portal but, rather, only for the capacity that is expected to be utilized based on the aforementioned forecast. As the number of Portal clients and portal based applications increases and thus the environment becomes more "mature", the methodology and cost model will rely more heavily on actual metrics and less on forecasts to determine client charge back.

Changes in Pricing of Portal Services

During April - May of each year (prior to the July start of the Georgia state government fiscal year), GTA will conduct annual price forecasting and adjustments. This forecasting activity will use the previous 12 months worth of Portal services utilization data combined with the utilization forecast for the subsequent 12 months in order to adjust client assessment for Portal service costs. All adjustments will be prospective; thus an agency client who is expected to utilize more services than originally anticipated will have the opportunity to address the resulting need for supplemental funding in the following legislative session.

Events that may impact the total costs to an agency include:

Event	Impact on Agency Bill	Explanation
More agencies join **georgia.gov** during a fiscal period than originally forecasted.	Decrease	An individual agency may see its bill for a service decrease as more agencies purchase that service. This would happen with services whose total management cost does not vary significantly with service utilization changes.
Change in agency needs (post forecast).	Decrease or Increase	An agency may request a change in the number of services or their respective utilization after the forecast period (e.g., as part of a change order to a Statement of Work/Memorandum of Understanding, for instance).
The start of the new fiscal period	Decrease or Increase	All agencies participate in a forecasting effort with GTA to determine the number and mix of services each agency will need in the upcoming fiscal period. GTA will then compute the price by service by agency based on the methodology described in this Chapter of the Guide.

Section 10 – Appendices

Appendix A: Terms and Definitions

The following terms are used throughout the **Joining georgia.gov Guide**:

Term	Definition
.NET	A set of Microsoft software technologies (Microsoft® .NET) for connecting information, people, systems, and devices. It enables software integration through the use of Extensible Markup Language (XML) Web services: small, discrete, building-block applications that connect to each other and to other larger applications via the Internet..
Agency	'Agency' means every state department, agency, board, bureau, commission, and authority but shall not include any agency within the judicial branch of state government or the University System of Georgia and shall also not include any authority statutorily required to effectuate the provisions of Part 4 of Article 9 of Title 11.
Agency CIO	Agency Chief Information Officer (CIO) is defined as any executive or leader who is accountable for, implements, and/or manages the agency's enterprise-wide information systems, function or unit.
Agency Content Administrator	Agency Content Administrator refers to the role and responsibilities of the person assigned the task of provisioning structured and unstructured content within the agency sub-portal
Agency Portal Manager	Agency Portal Manager is the person responsible for the agency's sub-portal achieving its goals of collaboration, personalization, content management, presentation and search capabilities.
Client	Any agency or governmental entity that provides information or services for deployment through georgia.gov.
COI	Community of Interest. Members of the intersection of two or more interdependent goal-centric organizations (e.g., agencies, local governments, public-oriented service providers, business partners,

Term	Definition
	or other external entities). These members will interact to develop and implement the policies and common mechanisms necessary to deliver integrated, intention-based services across georgia.gov.
Connector	Connectors are custom coding designed and built in support of exchange of information between applications.
Constituent	Any recipient or requester of information or services available to the public through georgia.gov. In the Joining georgia.gov Guide, a constituent is also referred to as a user or customer.
Content	Information (images, text, audio, or video) that comprises the display of a Web site outside of the CMS design template.
Content Contributor	Any person designated to create, edit, post, and publish original content.
Content Management	Content Management is the set of tools, policies, procedures and applications that are combined to deliver structured and unstructured meaningful information to the end user in the context of situational analysis and information relevance.
Cookie	A small text file placed on users' hard drives by previously visited Web sites. Cookies identify visitors and track their movements through a Web site. Information that a Web site puts in the HTTP header in response to a browser request. The browser stores this information, which allows a site to remember the browser in future transactions or requests.
CORBA	CORBA (Common Object Request Broker Architecture) technology is the open standard for heterogeneous computing. CORBA complements the Java^{TM} platform by providing a distributed objects framework, services to support that framework, and interoperability with other languages. The Java platform complements CORBA by providing "Write Once, Run Anywhere^{TM}" portability, a highly productive implementation environment, and a very robust platform. By combining the Java platform with CORBA and other key enterprise technologies, Java 2 Platform, Enterprise Edition creates the ultimate platform for enterprise solutions. CORBA standards provide the proven, interoperable infrastructure to Java 2 Platform, Enterprise Edition. CORBA technology is an integral part of the Java 2 platform through Enterprise JavaBeans, RMI over IIOP, Java IDL, and Java Transaction Service.
Data Persistence	Data that exists from session to session. Persistent data is stored in a database, on a disk or on tape.
EAI	Enterprise Application Integration (EAI) centralizes and exchange information between applications. EAI uses connectors to build interfaces which externalize applications as a way to reduce the impact of packaged application change.

Term	Definition
Executive Sponsor	The Executive Sponsor provides hands on leadership, maintain the business objectives of the enterprise, while fronting the implementation efforts, procure funding if required and most importantly, motivate fundamental organizations within the enterprise to support actions with the new program. The executive sponsor also must work with various organizations through out the enterprise to communicate the initiatives to internal and external stakeholders. Innovation, communication and sound organization are all required, as well as being informed to business requirements and technologies that will affect the project.
georgia.gov brand	The logo, verbiage, visual design, templates, and all aspects of presentation (clarity, professionalism, and reliability) that impact the user's impression of the State of Georgia's online presence.
GIF	Graphic Interchange Format. An image file format that is widely used on the Internet. GIF provides high-quality mage compression.
HTML	Hypertext Markup Language. The authoring language used to create documents on the World Wide Web. HTML defines the page structure, fonts, graphic elements and links to other documents on the Web.
Internet	The worldwide network of computers that communicate via standard protocols. The Internet provides file transfer, remote login, electronic mail, news, and other services.
IT Director	The Information Technology (IT) Director provides general oversight and support for all technology-based initiatives as well as coordinating and maintaining the IT infrastructure.
J2EE	Java 2 Enterprise Edition. A platform for building Web-based enterprise applications that was developed by Sun Microsystems, Inc. J2EE's core components are Enterprise JavaBeans (EJBs), JavaServer Pages (JSPs) and Java servlets plus several interfaces for linking to enterprise information resources. The J2EE interfaces include JDBC for databases, JNDI for directories, JTA for transactions, JMS for messaging, JavaMail for e-mail systems and JavaIDL for CORBA connectivity.
JavaBeans	The JavaBeans specification defines a set of standard component software APIs for the Java platform. The specification was developed by Sun with a number of leading industry partners and was then refined based on broad general input from developers, customers, and end-users during a public review period. The JavaBeans component architecture extends "Write Once, Run Anywhere™" capability to reusable component development. JavaBeans architecture connects via bridges into other component models such as ActiveX. Software components that use JavaBeans APIs are thus portable to containers including Internet Explorer, Visual Basic, Microsoft Word, Lotus Notes, and others.
JavaServer Pages	JavaServer Pages (JSPs) are "inside-out servlets" that make it easier to create and maintain dynamic Web pages. Instead of putting

Term	Definition
	what you want to write to the HTTP response inside of a Java print statement, everything in a JavaServer Page is written to the response, except what is placed within special Java statements. With JavaServer Pages you can start by writing the page in standard HTML and then add the dynamic features using statements in the Java language or by using JSP tags. The Struts distribution includes several JSP tags that make it easy to access the framework's features from a JavaServer Page.
Java™ Servlet	Java Servlet technology provides Web developers with a simple, consistent mechanism for extending the functionality of a Web server and for accessing existing business systems. A servlet can almost be thought of as an applet that runs on the server side
MPEG	Motion Pictures Experts Group. A compressed digital video standard. High-quality MPEG files consume a great deal of space and often require dedicated decoding (CODEC) hardware to replay them in real time at full-screen video resolutions.
Offline media	Any printed material.
Online media	Web sites and other Internet applications.
PDF	Portable Document Format. A file format created by Adobe Systems, Inc., that preserves all of the fonts, formatting, colors, and graphics of any source document, regardless of the software and computer platform used to create it. When added as an extension to the name of a computer file, PDF indicates that the file contains an image of a document in compressed form for ease of electronic distribution. The file can be opened by the appropriate computer application.
Personalization	The generation of custom content or presentation for Web users.
Plug-in	A program/application module that provides additional capability to a software package. Plug-ins are added to Web browsers to enable them to support new types of content (audio, video, PDF files, etc.).
Portal	A Web site that serves as a first "port of call" for constituents. Most portals are search engines offering news and other content facilities.
RIB	Release Information Bulletin. A conformance checklist employed during installation testing of software and the related user documentation. The checklist addresses such areas as (a) ease of use of the User Manual, including a simulation of the various installation or software distribution methods to detect flaws; and (b) verification of the user friendliness and comprehensiveness of the Installation Guide and Troubleshooting Manual.
Search Engine	A service that helps users find material on a Web site by typing in the topic. Submitting Web sites to major search engines for indexing is a way to increase traffic to the sites.

Term	Definition
ServiceCenter®	ServiceCenter® is the name of the Peregrine Systems, Inc. software product that is used by GTA to log, track, and transmit trouble tickets related to georgia.gov, as well as Tier 2 support contacts between the Portal Contact Center and the Agency Contact Center.
SSL	Secure Sockets Layer. A protocol for managing the security of message transmission on the Internet. It is included in Microsoft and Netscape browsers and in many Web server products. The protocol is often used in Web applications that require a secure link, such as e-commerce applications, and is also used to control access to Web-based subscription services.
Struts	Struts is an open source framework for building Web applications. Struts encourages application architectures based on the Model-View-Controller (MVC) pattern and provides services common to most Web applications. Struts helps developers deploy products that are reliable, scaleable, and easier to maintain.
Sub-portal	An agency's Web site within georgia.gov. Agency "business cards" are also considered sub-portals but will be replaced over time by agency Web sites.

Appendix B: Requirements Compliance

Checklist – For Content

- All file additions, modifications or deletions have been made in accordance with the requirements listed in the **Joining georgia.gov Guide**.
- All **georgia.gov** entries are relevant, accurate and complete.
- All multimedia supplied for publication include an alternate text version.
- All content supplied by the agency has been reviewed against the Accessibility Policy
- All backup and unwanted files created in the Portal Development Environment have been deleted.
- All content has been tagged and labeled appropriately within the CMS.
- All content meets the legal guidelines for its use.

_____   _____

(Name of Agency Content Administrator)   (Agency Name)

_____   _____
(Signature)   (Date)

Exceptions:

Explanation and Justification:

Appendix C: Requirements Compliance

Checklist - For Applications

- All application file additions, modifications or deletions have been made in accordance with the requirements listed in the **Joining georgia.gov Guide**.
- All **georgia.gov** entries are relevant, accurate and complete.
- All multimedia supplied for publication includes an alternate text version.
- All content supplied by an agency has been reviewed against the Accessibility Policy.
- All backup and unwanted files created in the Portal Development Environment have been deleted.
- All files are in the correctly named sub-directories and follow the appropriate naming and file extension standards.
- All content meets the legal guidelines for use.
- The application clearly communicates the Portal Contact Center Support telephone number as well as the agency's central address and telephone number or has a link to the agency "Contact Us" page.
- All scripts have been completed, tested and submitted to the Portal Contact Center prior to the application being released.
- An Inter-Agency Agreement (IAA) has been created and signed by the agency and the Portal Contact Center to clearly define the roles, responsibilities and escalation procedures set forth by both parties to support the application. In the future, the IAA will be replaced by a Service Level Agreement between GTA and the Agency to cover both Hosting and Support.
- The Project Schedule and Deployment Plan has been reviewed and updated with Data Center personnel and a Service Level Agreement has been mutually

accepted by the agency and the Data Center management prior to release of the application.

- The application complies with all security guidelines set forth in the "**Joining georgia.gov Guide.**"

_____
_____

(Name of Agency Content Administrator)   (Agency Name)

_____
_____

(Signature)   (Date)

Exceptions:

Explanation and Justification:

Appendix D: Memorandum of Understanding

This Memorandum of Understanding for Portal Development and Hosting Services ("MOU Agreement") is made and entered into as of the ____ day of _____, 200_ ("Effective Date"), by and between the Georgia Technology Authority ("GTA") and _____ ("Client"), collectively referred to as the "parties."

WHEREAS, GTA has developed an interoperable technology architecture and infrastructure for the provision of services related to the development, hosting, and maintenance of Internet Web sites; the provision of interactive voice response (IVR) services; the provision of Web-based application services and components; and related e-commerce and e-government services (collectively referred to as the "**georgia.gov**"); and

WHEREAS, _____, [CLIENT NAME], desires to partner with GTA in order establish a Client Internet presence and/or utilize the **georgia.gov** to provide certain Client data, information or services electronically;

NOW THEREFORE, in consideration of the promises and agreements hereinafter set forth, the parties hereby agree as follows:

1. GTA Services and Deliverables

GTA agrees to provide those services and deliverables set forth within the attached GTA Statement(s) of Work ("SOW"). As each Joining **georgia.gov** project is undertaken, a Statement of Work will be prepared describing that project's specific work. The SOW will be a numbered attachment to the MOU. Any and all services provided by GTA shall hereinafter be collectively referred to as "GTA Services." Any and all Web sites, Web pages, applications or other deliverables provided by GTA shall hereinafter be collectively referred to as "GTA Deliverables."

GTA's provision of Services and Deliverables to Client will be governed by GTA's "Joining georgia.gov Guide" ("Guide"), as supplemented by this MOU. This MOU incorporates by reference the terms of the Guide. The Guide is available to Client on GTA's internet website (www.gta.ga.gov) ("Website") and at GTA's offices during regular business hours at 100 Peachtree Street, Atlanta, Georgia 30303. GTA may modify the Guide from time to time, and any modification will become effective and binding beginning on the first day of the next calendar month following its posting on the Website. The contractual relationship between GTA and Client shall be governed by the following order of precedence: (i) the provisions of the SOW; (ii) the provisions of this MOU, and (iii) the Guide. All capitalized terms used herein and not expressly defined herein shall have the respective meanings given to such terms in the Guide.

2. GTA Responsibilities

Under this MOU, GTA shall provide the Client with the following functionality and support:

A. Manage, monitor and maintain the Portal Development, Test and Production environments, which includes Enterprise hardware and software.

B. Provide Hosting Services. When providing Hosting Services, GTA agrees to make such Web site(s) available for access on demand by users of the Internet or specifically

designated user groups in accordance with any specifications listed in the Service Level Agreement ("SLA") established between GTA and the Client. The SLA shall include, but shall not be limited to: availability of hosting services, storage, and security terms and conditions.

C. Provide Contact Center Services for the Portal. When providing Portal Contact Center Services, GTA agrees to provide Tier 1 and/or Tier 2 support in accordance with any specifications listed in the SLA established between GTA and the Client. The SLA shall include, but shall not be limited to: availability of Portal Contact Center services, escalation procedures and coordination procedures between GTA Portal Contact Center and the Client support services.

D. Provide technical support to the Client to resolve issues related to accessing Client's Web site(s) developed or hosted under this MOU.

E. Provide the Client's staff with access to training services and/or provide actual training for updating of Client's content and/or applications (if applicable).

F. Provide the Client's properly authorized representatives with appropriate access for updating of Client's content and/or applications (if applicable).

G. Install all required information services or databases related to Client's Web site(s) and Content in order to provide electronic access to Client's information.

H. Perform all GTA Services described in the SOW, this MOU, and in any attachments.

I. Perform Acceptance Testing on Client Content (where applicable) and applications which includes, but is not limited to, Quality reviews, Standards and Policy compliance and Performance testing.

J. Any variance or changes to the above GTA responsibilities will not be supported without Change Modification Requests.

3. Client Responsibilities

Under this agreement, the Client shall adhere to and provide the following:

A. Identify at least one staff member to act as the primary contact for this MOU and the responsibilities identified herein, although additional Client staff members may be identified as needed.

B. Provide timely notification of any problems with services performed by GTA.

C. Provide payment to GTA as set forth in Section 6 of this MOU.

D. Provide, update, upload and maintain Client Content and Materials.

E. Restrict and guard access provided to GTA's server(s) for Client's updating and maintenance of Client Content and Materials.

F. Permit GTA to make appropriate access of Portal databases and Portal Web sites from Client Web site(s).

G. Determine what Client Content and Materials are included, either on a limited or unlimited basis on Client's Web site(s).

H. Comply with Policies and Standards set forth by GTA in the Guide, as well as any other applicable Enterprise Policies and Standards which are now or may hereafter be established; provided, however that Client may request an exception or waiver as appropriate to those standards subsequently established to this agreement.

I. Create and submit a one time Memorandum of Understanding for migration of the first Client application or for the initial migration or creation of Client content, which ever occurs first.

J. Create and submit a Revised Memorandum of Understanding for deploying subsequent applications, or when exceptions are identified.

K. Promote and grow the **georgia.gov** brand and environments among agencies and external entities.

L. Encourage and contribute to the Service Areas and Communities of Interest of the Portal.

M. Collaborate with other agencies to create virtual services, where appropriate.

N. Follow processes and checkpoints set forth by GTA in the Guide for Content and Applications.

O. Submit confirmation of compliance with the Security policies and standards for Content and Applications residing on the **georgia.gov**.

P. Utilize the tools and templates available from GTA for development of Content and Applications in the Portal environment.

Q. Utilize Content templates and workflows for the development of new Client Content and the migration of existing Client Content.

R. Assign Content Administrators responsible for all Client Content and Authors to contribute Content on behalf of the Client.

S. Develop applications using the application standards and guidelines described in the Guide**.**

T. Attend Content Management training being implemented by GTA for the Enterprise Content Management tool.

U. Comply with PMI standards for project management and industry standard development and testing approaches using internal resources or vendors qualified on the Portal Development Services contract.

V. Utilize existing Enterprise components to satisfy application requirements where possible.

W. Work with GTA to identify and develop new Enterprise components required to satisfy individual Client design requirements and provide reusability for other agencies performing a similar function.

X. Host all Client Content and Applications on **georgia.gov** utilizing one of the integration models provided in the Joining **georgia.gov** Guide.

Y. Establish an Agency Contact Center and adopt the Distributed Portal Support Model

AA.   Provide Call Scripts, Frequently Asked Questions and Training to the Portal Contact Center regarding Client's specific content and applications.

BB.   The Client shall identify and provide detailed descriptions and justification of any exceptions to the above Client Responsibilities.

4. Client Content and Materials

In order for GTA to perform the GTA Services required under this MOU, Client must deliver to GTA, "Client Content and Materials" in a timely manner as specified by the Client Deployment plan and project schedule. Client Content and Materials, shall include, but shall not be limited to any and all files, pages, data, works, information and/or materials on, within, displayed, linked or transmitted to, from or through the Web site, including, without limitation, trade or service marks, images, photographs, illustrations, graphics, audio clips, video clips, e-mail or other messages, metatags, domain names, software and text. Client bears all responsibility for obtaining, maintaining, and verifying proper authorization for the use and display of any third party materials contained with Client Content and Materials.

5. Open Record Requests for Client Content and Materials

Client acknowledges and agrees that Client is the owner or proper custodian of all Client Content and Materials. As such, Client, not GTA, is responsible for response to, and compliance with, all Open Record Requests received by Client regarding Client Content and Materials.

6. Payment

As consideration for the services provided by GTA, Client shall compensate GTA for professional services, hosting and maintenance services as follows:

[TBD]

Payment shall be made monthly, within 30 days of receipt of invoices from GTA.

7. Limitation of Liability

No civil action may be brought under this MOU by one party against the other party. GTA shall not be held liable for any allegation that Client Content and Materials infringes or violates a third party's rights, including proprietary information and non-disclosure rights, or any Intellectual Property rights. As used herein, "Intellectual Property" shall mean any and all know-how, inventions, patents, copyrights, models, designs, trademarks, trade dress, trade secrets, test results, knowledge, techniques, discoveries, regulatory filings, or other information (whether or not patentable and whether or not in tangible or intangible form), and any other industrial or proprietary rights, and any documentation relating thereto, and any and all applications for any of the forgoing, whether or not registered as of the Effective Date or at any later date;

8. Term and Termination

A.   Term. The term of this MOU shall commence on the Effective Date and shall continue for a period not to exceed 50 years unless terminated sooner by either party under a provision of this section.

B.   Termination. This MOU may be terminated (i) upon delivery of thirty (30) days written notice of intent to do so, signed by a duly authorized representative of either party; (ii) for

default at the discretion of the non-breaching party; or (iii) by operation of law or act of the Georgia General Assembly.

C. <u>Rights Upon Orderly Termination</u>. Upon termination of this MOU, each party shall upon demand return to the other, all papers, materials and other properties of the other held by each for purpose of performance under this MOU.

9. Compliance With All Laws

Each party agrees that it will perform its obligations hereunder in accordance with all applicable federal, state and local laws, rules and regulations now or hereafter in effect.

10. Severability

If any term or provision of this MOU shall be found to be illegal or unenforceable then, notwithstanding, all other terms and provisions of this MOU shall remain in full force and effect and such illegal or unenforceable term or provision shall be deemed stricken herefrom.

11. Amendments in Writing

No amendment to this MOU shall be effective unless it is in writing and agreed upon by duly authorized representatives of both parties.

12. Client Personnel

The Client acknowledges and agrees that all persons assigned by it to perform under this MOU shall be employees of the Client or contractors authorized by GTA to perform the rights and obligations set forth herein. Client will not provide access to GTA servers or Client servers located at GTA to contractors of Client without prior written authorization of GTA. Client will use its best efforts to keep secure any access provided to Client for purposes of maintaining and updating Client's Web site(s).

13. Successors and Assigns

The covenants herein expressed shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties.

14. Entire Agreement

This MOU together with the attached Exhibits, which are incorporated by reference, constitutes the complete agreement and understanding between the parties.

IN WITNESS WHEREOF, each party, by its respective officers authorized so to do, has executed this MOU.

AGREED:

   CLIENT: **GTA:**

_____   _____

Signature   *Signature*

_____   *CIO & Executive Director*
                                          _____
Name and Title   *Name and Title*

Appendix E: Sample Hosting Service

Level Agreements (SLA)

❧   **NOTE**: This section is scheduled to be completed in a future release of the **Joining georgia.gov Guide**.

Appendix F: Portal Contact Center FAQs Template

Agencies are responsible for providing Frequently Asked Questions (FAQs) regarding their specific content and applications. They are also responsible for ensuring that all pertinent information has been provided to Portal Contact Center personnel to assist with constituents' questions.

Agencies may use the following templates as guidelines for creating FAQs:

	Source /Topic	Question	Agency Contact	Response
1.	Mail-in	How do I renew by mail?	PCC DMVS-CC	Complete the form at the bottom of the letter.
2.	Mail-in	I did not receive a DMVS envelope to mail my Renewal Application. What is your mailing address?	PCC DMVS-CC	Georgia Department of Motor Vehicle Safety P.O. Box 23042 Columbus, GA 31902-3042
3.	N/A	Why didn't you send a Renewal Application for my child's ID card?	PCC DMVS-CC	Children change rapidly as they age, so a new picture is required each time they renew their ID card.

Category: Defined Call Type

Currently, **georgia.gov** uses the following categories to define call types:

- Referrals (Provide Contact Information)
- Referrals (Transfer Calls)
- Application (Name of Agency Application)
- Technical
- Complaints
- Miscellaneous/Other

Appendix G: Portal Contact Center

Call Script Template

Agencies are responsible for providing Call Scripts regarding specific content and applications and for ensuring that all pertinent information has been provided to Portal Contact Center personnel to assist with constituent questions.

Agencies may use the following templates as guidelines for creating Call Scripts:

Greetings Call Script (sample)

Type	Scenario	Suggested Script
Initial Greeting		<"Good Morning/Good Afternoon">. This is georgia.gov. My name is (agent name). How may I help you?" (or "how may I be of assistance?")
Closing Greeting		"Thank you for calling georgia.gov."

Informational Call Script (sample)

Type	Scenario	Suggested Script
Portal Information	Constituent wants to know what the Portal is	"georgia.gov is a single entry point for information relating to the state of Georgia and a growing number of on-line applications..."
Portal Information	Constituent wants to know why it changed	"The State of Georgia Web site has changed to reflect a new look and feel and is much easier to navigate."

Referrals/Provide Contact Information Call Script (sample)

Type	Scenario	Suggested Script
To Non-georgia.gov Agency (Option 1)	Constituent is online and is interested in finding the navigation path	"The information you have requested must be provided by _____ (fill in agency or authority). I can direct you to their contact information on the georgia.gov Web site."
To Non-georgia.gov Agency (Option 2)	Constituent is not online or is online but just wants information	"The information you have requested must be provided by _____ (fill in agency or authority). I can provide you with their phone number and e-mail

Type	Scenario	Suggested Script
		address."
To Georgia Net	Constituent has issue with Georgia Net on-line services (Non-Credit) or Other Agency wants to be a part of the Portal	"The information that you have requested must be provided by another department. The department is Georgia Net. They can be reached at 404-651-8690. Their e-mail address is traffic@gta.ga.gov. Their hours of operation are 8am – 5pm, Monday through Friday."
To Accounting	Constituent calling with issue related to Georgia Net On-line Monthly Billing Services	"The information you have requested must be provided by the GTA Accounting Department. The contact name is Diana Harford. She can be reached between the hours of 8AM-4:30PM, Monday-Friday at the following telephone number and e-mail address: 404-463-2337 dianah@gta.ga.gov ."
To Accounting	Colleges/Universities and Agencies calling with issue related to Georgia Net On-line Services credits	"First you must contact the agency or college to obtain a credit authorization. Once it is obtained, your request will be handled by the GTA Accounting Department. The contact name is Denise Pace. She can be reached between the hours of 8AM-4:30PM, Monday-Friday at the following telephone number and e-mail address: 404-463-2342. dpace@gta.ga.gov ."

Technical Call Script (sample)

Type	Scenario	Suggested Script
Constituent Reporting Technical Difficulty	Constituent meets technical requirements and CSR will create Trouble Ticket for new issue	"I need to take down some basic information regarding your issue. I will pass it on to our technical staff and they will look into this matter as quickly as possible. Can you briefly describe the technical issue that you have identified?"

Constituent Reporting Technical Difficulty	Constituent's technical environment does not meet georgia.gov minimum requirements	"Let me ask you a few questions to confirm that your technology is compatible with the requirements of georgia.gov." (Ask constituent Technical FAQ's) "Based upon what you answered, your system does not meet the minimum georgia.gov technical requirements. You must ensure your environment meets the following requirements in order for the Web site to effectively function." (Read list of minimum requirements)
Constituent Reporting Technical Difficulty	Constituent cannot confirm/answer basic FAQs about their technical environment	"Let me ask you a few questions to confirm that your technology is compatible with the requirements of georgia.gov." (Ask constituent Technical FAQ's) "If you are still having an issue, please call us back."
Constituent Reporting Technical Difficulty	Constituent meets technical requirements and this is a known issue or outage	"Thank you for reporting this issue to us. We are aware of the problem and are currently working on it."
Constituent Requesting Help Desk/Technical Transfer	Constituent wants to be transferred to a help desk or technical desk	"I am not able to transfer your call directly to our technical staff. I will register your technical issue and pass it along to them. They will address this situation as quickly as possible"

Complaints Call Script (sample)

Type	Scenario	Suggested Script
Customer Complaint	Customer requesting a callback	"Can you briefly state your complaint or issue? I will collect this information and refer it on to the proper authority. I will provide this information to them and indicate that you requested a callback.
Customer Complaint	No callback required	"Can you briefly state your complaint or issue? I will collect this information and refer it on to the proper authority. We appreciate you taking the time to register your concerns with us."

Miscellaneous Other Call Script (sample)

Type	Scenario	Suggested Script
Direct Agency Transfer	Constituent wants to be transferred to another agency	"I am not able to transfer your call to _____ (agency, authority). I can provide you with their contact information."
Media	Caller identifies himself or herself as being part of the media looking for information (TV, newspaper, magazine, radio, etc.)	"You need to contact another department for that information. That department is Office of Communications. They can address your questions. The contact is Joyce Goldberg. The phone numbers are 404-463-4424 and 404-463-2347. The e-mail address is jgoldberg@gta.ga.gov. Thank you for calling the georgia.gov."
Government Threat	Caller indicates some sort of threat against the state of GA or a government building (state, local, county or city)	Agent will keep the caller talking on the phone and get the supervisor. Supervisor will handle the call. Note: Agent records all information relevant to the call including time, sex(M/F), accent (if any), tone of voice and exact words stated, etc.
Out of Scope	Call is out of the PCC's scope	"The Contact Center is the point of contact for all georgia.gov questions. We address questions related to the information provided on this Web site." Note: If appropriate, make a suggestion to Constituent of another entity to contact.

Appendix H: Distributed Portal Support Model
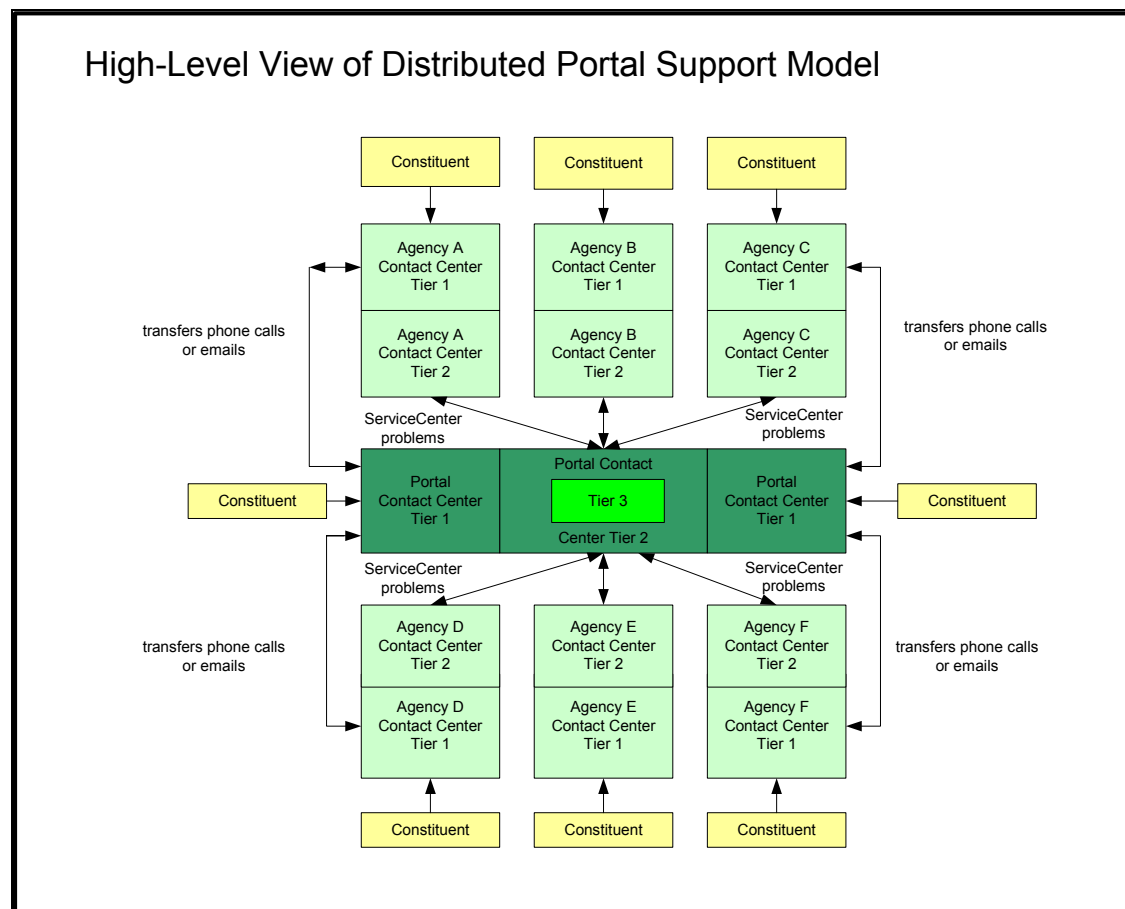
Figure H-1: High-Level View of Distributed Portal Support Model

Scope of Distributed Portal Support Model

Distributed Portal Support is the process and activities required to resolve contacts from constituents about content and services available through **georgia.gov**. Constituents are given the choice of sending e-mails or calling the address/phone number presented on **georgia.gov**. (A link to **georgia.gov** contact information can be found on each page. Agencies may include additional contact information on pages of their sub-portal by modifying those pages through the Web-based CMS application.)

Responsibility for resolving constituent contacts delivered through **georgia.gov** is shared between the Georgia Technology Authority (GTA) and the Agency Contact Center. Detail descriptions of key roles in the model, and the support contact process-flows from the constituent to resolution, are available in 10.8.2 Description of Key Roles in the Model. Every agency providing content and/or services through **georgia.gov** must clearly understand its role in the Distributed Portal Support Model to perform the functions described under the Agency Contact Center Tier 1 and Agency Contact Center Tier 2. (See Figure H-1 High-Level View and Figure H-2 Detailed View of the Distributed Portal Support Model) Support roles and responsibilities will be detailed and agreed upon in the Service Level Agreement between GTA and the agency.

See Appendix E: Sample Hosting Service Level Agreements (SLA).

Figure H-2. Detailed View of Distributed Portal Support Model
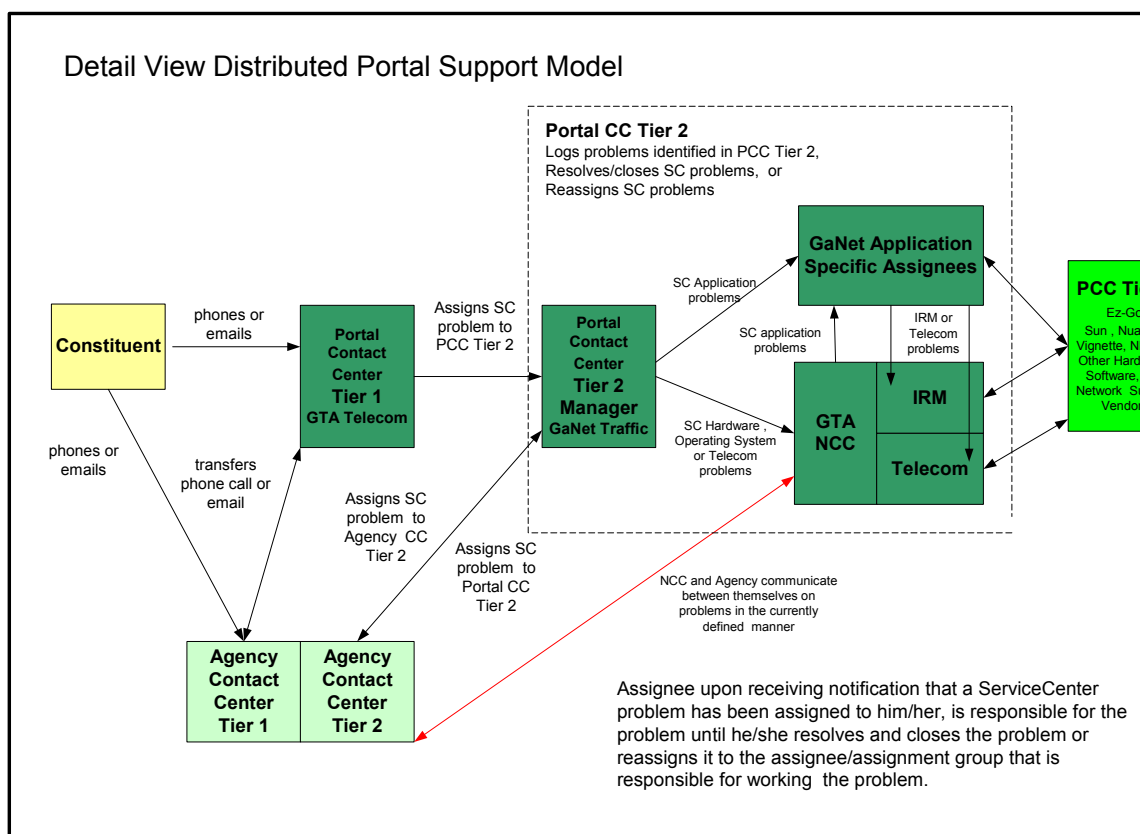
GTA is responsible for the functions performed by the Portal Contact Center Tier 1 and Portal Contact Center Tier 2, and for communicating with the Portal Contact Center Tier 3. Specifically, GTA is responsible for problem resolution for the Portal infrastructure, common services, and enterprise content. In some specifically identified instances, where the agency has provided detailed Call Scripts and FAQs, GTA is also responsible for resolving problems related to agency content and/or services. Those instances must not only be accounted for in the agency provided Call Scripts and FAQs but also noted in the hosting Service Level Agreement.

See Appendix E: Sample Hosting Service Level Agreements (SLA).

Agencies are responsible for the functions performed by the Agency Contact Center Tier 1 and the Agency Contact Center Tier 2. Agencies are responsible for problem resolution with their content and services and for notifying the Portal Contact Center Tier 2 if problems with the Portal infrastructure are identified.

For sample Agency Contact Center staffing models, see section 10.8.2.8 Agency Contact Center Staffing Models.

Description of Key Roles in the Model

Portal Contact Center (PCC) Tier 1

For a diagram of the Distributed Portal Support Model, see Figure H-1 High-Level View of Distributed Portal Support Model and Figure H-2 Detailed View of Distributed Portal Support Model.

The PCC Tier 1 is the first point of contact for most constituent phone calls and e-mails. The PCC Tier 1 also receives contact transfers from the Agency Contact Center Tier 1. Currently, the PCC Tier 1 can be reached at 404-818-6600/866-351-0001 and help@**georgia.gov**. The PCC Tier 1 operates from 8:00 AM to 5:00 PM, Monday through Friday, on State of Georgia workdays.

The PCC Tier 1 will always attempt to respond to a constituent call or e-mail without transferring the contact as long as the nature of the contact is in the domain for PCC Tier 1 resolution. Examples of requests that would be in the PCC Tier 1 domain are contacts for information, navigational instructions, "how to" instructions, comments, suggestions, complaints and   about GTA supported **georgia.gov** applications/components and content. PCC Tier 1 attempts to resolve those contacts while on the phone with the constituent or by responding to the constituent's e-mail. PCC Tier 1 will handle contacts related to agency content and applications if specified in the Service Level Agreement (SLA) and only when a Call Script and FAQ have been provided by the agency related to the nature of the contact.

Sample Call Scripts and FAQs can be found in 10.8 Portal Contact Center Call Script Template and 10.7 Portal Contact Center FAQs Template respectively. A sample Hosting SLA can be found in Appendix E: Sample Hosting Service Level Agreements (SLA).

Constituent contacts that are agency specific and not addressed in the agency-provided Call Scripts or FAQs will be transferred by the PCC Tier 1 to the Agency Contact Center Tier 1. (This typically includes problems, comments, complaints or suggestions about agency content or applications.)   The transfer can be a physical transfer of the phone call, forwarding of an e-mail, or providing redirect information to the caller or e-mail. Agencies must provide the PCC Tier 1 a priority queue number for transferring calls to the Agency Contact Center Tier 1. At the point a constituent contact is transferred to the Agency Contact Center Tier 1, tracking of that contact by the PCC stops. The PCC Tier 1 codes the calls it receives and obtains call metrics from its Mitel equipment.

If the constituent contact is a technical problem, comment, complaint, or suggestion for GTA- supported **georgia.gov** applications/components or content that the PCC Tier 1 could not resolve, the PCC Tier 1 will log the contact into the **georgia.gov** Problem Management System, ServiceCenter[®], as a problem and it is assigned to the PCC Tier 2 Assignment Group. The problem is logged as "experienced by a generic Portal user." The PCC Tier 2 will attempt to resolve and close the problem without personal contact with the constituent. All direct contact with the constituent is at the PCC or Agency Contact Center Tier 1 level.

Agency Contact Center (ACC) Tier 1

For a diagram of the Distributed Support Model see Figure H-1High-Level View of Distributed Portal Support Model and Figure H-2 Detailed View of Distributed Portal Support Model.

The ACC Tier 1 is the point of contact for constituent calls or e-mails, or for Portal Contact Center (PCC) Tier 1 transfers of contacts relate to agency specific content or applications. Agencies must provide the PCC Tier 1 a priority queue number for transferring calls to the ACC Tier 1. The ACC Tier 1 receives constituent contacts for agency specific information, problems, comments, complaints, or suggestions about agency supported applications/components or content. The ACC Tier 1 handles all calls or e-mails in its resolution domain. Any agency-related technical issues with content or applications are forwarded to the ACC Tier 2. The ACC Tier 1 transfers any calls or e-mails concerning **georgia.gov** operations or GTA supported content or applications/components to the PCC Tier 1. The ACC Tier 1 is manned, at a minimum, the same hours as the PCC Tier 1. In some cases the ACC hours extend beyond the PCC Tier 1 hours. If the ACC Tier 1 has a phone contact that should be transferred to the PCC Tier 1 after hours, the ACC Tier 1 will advise the constituent to either call the PCC Tier 1 during normal business hours or send an e-mail to the PCC Tier 1. E-mail contacts can be forwarded 24 hours a day to help@**georgia.gov**. E-mails will receive a response from a PCC Tier 1 agent within 24 hours or the next business day.

Portal Contact Center (PCC) Tier 2 Manager

For a diagram of the Distributed Support Model see Figure H-1High-Level View of Distributed Portal Support Model and Figure H-2 Detailed View of Distributed Portal Support Model.

The PCC Tier 2 Manager receives e-mail notifications from the Problem Management Tool when a problem is identified and assigned to the PCC Tier 2 Assignment Group. The PCC Tier 2 Manager performs triage on the problem. The PCC Tier 2 Manager either resolves and closes the problem in the Problem Management Tool or reassigns the problem to the appropriate assignment group. When reassigning a problem, a comment is documented on the problem action/resolution tab to explain why the problem was reassigned.

- Problems with GTA-supported **georgia.gov** applications/components or content are assigned to a GTA assignment group identified to support the specific content or application/component.
- Problems with agency supported content or applications/components are assigned to an Agency Contact Center (ACC) Tier 2 assignment group identified to support the Agency specific content or application/component.
- Problems with hardware, operating systems, or network are assigned to the GTA/IRM Duty Manager.
- Problems with Portal middleware (Sun One Web Server, Sun One Proxy Server, Sun One Application Server, Sun One Directory Server, Sun One Portal Server, Sun Multi Device Software) are the responsibility of GTA/IRM, specifically the Unix Support Group.

GTA GaNet and IRM Divisions (Unix Support) share responsibility for problems with the CMS.

Reassigning the problem causes a notification in the Problem Management tool to the assignee/assignment group that the problem has been assigned. The assigned group will resolve/close or reassign the problem. If responsibility for a problem cannot be determined, the PCC Tier 2 Manager will own the problem. If the PCC Tier 2 Manager is unable to resolve the problem using the PCC Tier 2 and the PCC Tier 3, the PCC Tier 2 Manager will escalate the problem to the GTA/GaNet Traffic Manager.

Portal Contact Center (PCC) Tier 2

For a diagram of the Distributed Support Model see Figure H-1High-Level View of Distributed Portal Support Model and Figure H-2 Detailed View of Distributed Portal Support Model.

The PCC Tier 2 is composed of all assignee/assignment groups within the GTA GaNet, IRM, or Telecom Divisions that may be assigned Portal problems to resolve. When notified by the Problem Management System that a problem has been assigned, the assignee/assignment group follows its organization's internal procedures to resolve and close the problem. The problem may require collaboration with a PCC Tier 3 Vendor. If the assignee/assignment group determines that the problem needs to be reassigned, then the current assignee reassigns the problem within PCC Tier 2 or the ACC Tier 2.

Agency Contact Center (ACC) Tier 2

For a diagram of the Distributed Support Model see Figure H-1High-Level View of Distributed Portal Support Model and Figure H-2 Detailed View of Distributed Portal Support Model.

The ACC Tier 2 receives problems from the ACC Tier 1. Also, the PCC Tier 2 Manager can assign Problem Management System problems to the ACC Tier 2 Assignment Group when the problem is related to agency supported content or applications. The ACC Tier 2 works to resolve and close the assigned problems or to reassign them. If the ACC Tier 2 identifies a technical issue relating to Portal operations, the ACC Tier 2 logs the problem and assigns/reassigns it to the PCC Tier 2 Assignment Group (assignee PCC Tier 2 Manager).

Portal Contact Center (PCC) Tier 3

For a diagram of the Distributed Support Model, see Figure H-1High-Level View of Distributed Portal Support Model and Figure H-2 Detailed View of Distributed Portal Support Model.

The PCC Tier 3 is composed of the Hardware, Software and Network Vendors that support the Portal. Support agreements exist for PCC Tier 3 Support Vendors. Each Vendor has its own reporting and escalation procedure which PCC Tier 2 (GaNet, IRM and Telecom) follows. PCC Tier 2 makes contact with the PCC Tier 3 support vendors following the vendors' contact procedures. PCC Tier 3 support vendors report back status and resolution to the GTA individual who requested the PCC Tier 3 contact. The PCC Tier 2 individual in GTA assigned the ® problem documents the problem resolution and closes the problem in the Problem Management System or reassigns the problem.

Other Problems Identified with Possible Impact to Portal Operations

For a diagram of the Distributed Support Model see Figure H-1High-Level View of Distributed Portal Support Model and Figure H-2 Detailed View of Distributed Portal Support Model.

If the GTA (Network Control Center, GaNet, IRM, Telecom) or an Agency Contact Center (ACC) identifies a problem condition which could impact Portal operations, then the Network Control Center, GaNet, IRM, Telecom, or the Agency Contact Center will send an e-mail to the PCC Tier 2 Manager (pcctier2mgr@gta.ga.gov) explaining the problem condition. The PCC Tier 2 Manager will decide if the problem condition needs to be broadcast to the Portal Listserv. Examples of possible problem conditions are: part of the Network is down, an application is degrading response time for all applications on the mainframe, or a database used by a Portal service is not operational. Sending an e-mail to the Listserv GTA-PORTAL-SUPPORT@LIST.STATE.GA.US will broadcast the problem condition to key personnel in GTA (the Network Control Center, IRM, Telecom, GaNet, and the Portal Contact Center), and the Agency Contact Centers.

Agency Contact Center Staffing Models

The **georgia.gov** Portal Contact Center (PCC) uses a staffing model to determine the number of contact center agents needed to support the Portal and current agency content. The PCC has successfully used this model to exceed the desired support level which is based on the current Georgia Public Service Commission (PSC) rules for incumbent utility providers in Georgia. Adopted in November 2002, the PSC require incumbent utility companies to answer 90% of contact center support calls within 20 seconds 100% of the time. The PCC uses the PSC rule as a goal and has consistently exceeded this goal. Currently 98.9% of PCC calls are resolved within 20 seconds. All e-mails are answered within 24 business hours of receipt.

In order to provide this level of service, the PCC must take agent productivity into account. Such items as annual leave, sick leave, training time, meeting time, etc. are all incorporated into the staffing model. The current model assumes that each agent has an efficiency rating of 79.4%.

The PCC forecasting model can be used by agencies when determining the number of contact center agents needed to staff the Agency Contact Center (ACC). Below are some examples of staffing numbers based on assumptions regarding the number of telephone calls and e-mails an ACC expects to receive each week. (Actual numbers will also reflect the quality and extent of the agency Call Scripts and FAQs which aid in minimizing the amount of time to resolve a problem.)

ACC Staffing Example 1

# of calls received weekly	500
# of e-mails received weekly	100
Average Call Duration	200 seconds

The number of ACC agents needed in this example would be 5.

ACC Staffing Example 2

# of calls received weekly	1000

# of e-mails received weekly	200
Average Call Duration	200 seconds

The number of ACC agents needed in this example would be 10.

ACC Staffing Example 3

# of calls received weekly	2000
# of e-mails received weekly	400
Average Call Duration	200 seconds

The number of ACC agents needed in this example would be 14.

Each agency joining **georgia.gov** is responsible for establishing their own ACC, adopting the Distributed Portal Support Model, providing Call Scripts and FAQs to the PCC, and training the PCC on agency specific content and applications. The processes in Chapter 4 Processes for Deploying to **georgia.gov** describe the processes for deploying content and applications to **georgia.gov**.

For more information regarding the effort involved in establishing an Agency Contact Center contact GTA.

Distributed Portal Support Model Joining Responsibilities

Agency Joining Responsibilities

- Estimate the expected constituent call volume to the Portal Contact Center for agency related content and/or applications.
- Identify and establish agency constituent service organization to perform the Agency Contact Center Tier 1 and Tier 2 functions from 8:00 AM to 5:00PM on State of Georgia workdays.
- Provide Agency Contact Center Tier 1 main call queue transfer phone number and priority call queue transfer phone number.
- Provide guidelines to Portal Contact Center on conditions when main call queue transfers or priority call queue transfers are appropriate.
- Provide agency e-mail id to receive forwarded e-mails from the Portal Contact Center.
- Provide Call Scripts and FAQs to the Portal Contact Center Tier 1 for agency related content and application problem resolution. Sample Call Scripts and FAQs can be found in 10.8 Portal Contact Center Call Script Template and 10.7 Portal Contact Center FAQs Template respectively.
- Provide training to the Portal Contact Center Tier 1 on agency related content and applications. When significant changes are made to agency content and/or

applications, the agency must notify the Portal Contact Center in advance and provide additional training.

- Provide contact information on agency personnel for the Portal Contact Center Tier 2 Manager to use to report Portal problems to the agency.
- Request ServiceCenter® access for Agency Contact Center Tier 2 personnel that will be logging or receiving problems.
- Establish and maintain agency sub-portal assets in theProblem Management System.
- Establish and maintain agency assignment group(s) in the Problem Management System.
- Work with GTA Liaison Team to establish Service Level Agreement. See Appendix E: Sample Hosting Service Level Agreements (SLA).

GTA Joining Responsibilities

- Provide the Portal Contact Center Tier 1 main call queue transfer phone number (404-818-6600/866-351-0001) and e-mail id (help@**georgia.gov**) to the Agency Contact Center for forwarding contacts to the Portal Contact Center from the Agency Contact Center.
- Provide basic Contact Center call response and transfer orientation to Agency Contact Centers.
- Provide orientation on the Distributed Portal Support Model to agencies.
- Provide access to and training on the use of the Problem Management System to Agency Contact Center Tier 2 personnel.
- Guide the agency in the set-up of the Problem Management System assets, assignment groups, personnel access requests, and PC configuration if required.
- Work with agencies to establish Service Level Agreement. See Appendix E: Sample Hosting Service Level Agreements (SLA).

Distributed Portal Support Model Operational Responsibilities

Agency Operational Responsibilities

- Respond to and resolve all constituent contacts within the agency's problem resolution domain.
- Transfer phone and e-mail contacts within the Portal Contact Center Tier 1 problem resolution domain to the Portal Contact Center Tier 1. Agency Contact Center Tier 1 will phone or e-mail transfer contacts to the Portal Contact Center Tier 1.
- Log in the Problem Management System any technical problems not in the Agency Contact Center Tier 2 problem resolution domain and assign the technical problems to the "Portal tier 2" assignment group. The Peregrine ServiceCenter® Manual provides agencies with detailed instructions on how to use the Problem Management System product.

- Respond, resolve, or reassign problems assigned to the agency assignment group in the Problem Management System.
- Report, by e-mail, to the Portal Contact Center Tier 2 Manager (pcctier2mgr@gta.ga.gov) other agency problems which could impact the agency's content or application availability. (e.g., database problems.)

GTA Operational Responsibilities

- Maintain a reliable, secure, accessible **georgia.gov** infrastructure and common services for supporting **georgia.gov** content and applications.
- Respond and resolve all constituent contacts within the Portal Contact Center's problem resolution domain.
- Transfer phone and e-mail contacts not in the Portal Contact Center problem resolution domain to the Agency Contact Center Tier 1. Portal Contact Center Tier 1 will phone or e-mail transfer contacts to the Agency Contact Center Tier 1.
- Log technical problems in the Problem Management System for assigning to the "Portal tier 2" assignment group, if the technical problem is in the Portal Contact Center Tier 2 problem resolution domain.
- Reassign technical problems in the Problem Management System to the agency assignment group, if, after logging the problem, it is determined that the problem is in the agency problem resolution domain.
- Respond, resolve, or reassign problems assigned to the Portal Tier 2 assignment group in the Problem Management System.
- Report other operational problems by e-mail to the Agency Contact Center personnel identified for notification.

Index